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HYPER ISSUE!

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EGADS:

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plus all the latest
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confused, hyperexplained

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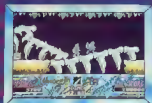
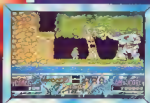
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SPECIALS

CD-I BATFANTASY 31

Papa Moreno, New York cartoonist, contributor to Heavy Metal and Thunder Cats (amongst many others), is designing the ultimate interactive comic experience.

Violence



VIETNAMANIA 28

Not content with Platoon, Ocean are now storming into Vietnam with The Lost Patrol. ACE followed them into the jungle.

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ACE is undercover agent infiltrated the CES Show in Las Vegas and returned with a sizzling expose of technology, featuring tomorrow's technology from today's international developers.

BLASTS FROM THE PAST 87

ACE meets the first ever and-of-level nasty in the definitive guide to shoot-em-up history



X-Out - first of a new breed of shoot-em ups and a long, long way from invaders.

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The decade that created computer entertainment draws to an end as we present the final episode of the greatest story ever told

MICRO-PRATCHETT 28

We've absolutely no excuse for putting Terry Pratchett in the magazine, except he makes us laugh, writes great books (Colour of Magic, Discworld series...), and...er... uses a computer

MEET THE MAESTROS 81

The ACE Conferences could change your whole attitude towards games: but only if you turn up

GAMES BUSTING

This month's no-holds-barred reviews include the surprisingly good Pro Tennis from Ubisoft and the surprisingly disappointing Harley Davidson from Mindscape. And we've introduced the new 1990's PIC technology to make ACE's reviews pages look even better than ever.

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HYPER HORROR!

Fergus McNeill used to struggle with The Quill to produce home-break text and graphic adventures, now he tramps through woods with a video camera and a dagger, creating scenes for his first hypergame, Psychokiller programmed using CRL's EGADS generator. Find out more on page 11 and pages 61/62.



WIN A VCR

To celebrate the launch of The Lost Patrol, Ocean are giving away a free

APOCALYPSE NOW...

It's started. Games-programming technology is reaching critical mass. The Big Software Meltdown is about to begin...It's all to do with the development of hypermedia and its games derivative: the hypergame.

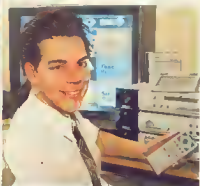
You've already read about Cosmic Osmo in ACE. Now you can check out:

- **Pepe Moreno, the New Yorker whose interactive comic is living proof of his claim that digital data is the entertainment medium of the future.**
 - **The theories and facts behind hypermedia, CD-I, DVI, buttons, and much more in the ACE Hyperguide**
 - **The beginnings of the UK software revolution: which companies are leading the race to develop new games technologies?**
- And if that's not enough, just wait till next month, when we bring you exclusive location reports direct from the USA in a bumper American Issue.**

HYPER ISSUE!

HYPERCONFUSED?.....57

Somewhere, someone is pouring millions of dollars into the development of games that will soon take over the world. Find out why, what, where, and when.



Alastair Scott-Orland: pioneering the development of CD-I entertainment at Cinematix Solutions. The machine is a Philips CD-I unit as previewed in ACE issue 24

HYPER-DEVELOPED.....10

A quick peek at two new multimedia entertainments. Fergus McNeill's *Psychokiller* and Compact Solution's *Guinness Book of Records*. We reckon these products are the spearhead of a revolution in entertainment software technology

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Maps, tips, pokes (and how to poke them) - everything the mortally wounded ego needs to restore pride and high scores in today's toughest games

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Land hol Ocean finally launches the superlative *Rainbow Islands*. Hard Drivers get extra tracks, plus all the latest whispers from the world of advanced computer entertainment.

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The ACE Stockmarket: Britain's only games chart that goes by authoritative opinion, and not hyped sales, the ACE Crossword the ACE Diary, in fact, a plethora of pleasures for your pinkies

BAT-FANTASY!

Many thanks to DC Comics for helping us arrange our interview with Pepe Moreno in the US. *Batman: Digital Justice*, the comic, will be available in the UK in February; the Macintosh CD-ROM versions should be out later this year. The CD-I version awaits a suitable hardware platform to perform: watch this space.

All Batman artwork © DC Comics
1989

R OCEAN GET IT TAPED - P31

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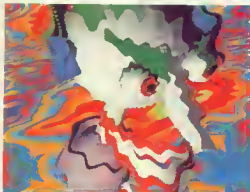
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In 2320, interstellar
travel has become as
commonplace as
mission to colonise the
universes lie well underway.
But then the Outlie
appeared. No-one knew
where they came from,
but it was obvious what
they were after... energy
— and they'd stop at
nothing to get it. They
favour charged Black
into one. And they just
turned your latest colony
not big enough for the
both of you.



BATMAN ON CDI

An ACE exclusive by Rik Haynes in New York



Batman Digital Justice © 1989 DC Comics Inc. All Rights Reserved

Warner Bros. and Sony are currently negotiating a deal to produce DC Comics' - a subsidiary of Warner Bros. - new cyberpunk Batman Digital Justice comic on CDI. The agreement may also include other Warner Bros. CDI projects in the future, which could be tie-ins with Prince music, Clint Eastwood Dirty Harry movies or Time magazine - all of which are a part of the giant Warner Bros. corporation.

The completely computer-generated Batman Digital Justice comic book is available in the stores later this month, and its creator Pepe Moreno is currently working on an interactive CD-ROM version for the Macintosh and PC. Amazingly these hypercomic versions will use the same data as their paper parent. Moreno explained to ACE: "It's all digital data and digital data is very easy to manipulate. Digital is the art medium of the future."

ACE visited Pepe Moreno at his Manhattan studio in New York for an exclusive interview with the person who "sells the future to corporations", the creator of the world's first hypercomic - the article starts on page 23. For a full explanation of CDI and hypermedia turn to page 57

AT THE END OF THE RAINBOW...

Ocean is releasing the home conversions of the fantastic Rainbow Islands Tafto co-op later this month on all major micro formats.

This 934-rated sequel to Bubble Bobble was written by Graftgold for Microprose last year - the ST version was reviewed back in ACE 24. Unfortunately for Microprose the original deal with Tafto fell-through and it was unable to release its excellent micro conversions.

Now Ocean has signed an agreement with Tafto securing the home computer rights to the game and has bought Graftgold's Rainbow Islands computer code from Microprose for an undisclosed sum rumored to be in the region of £50000.



Ocean looks for another pot of gold

ACE NEEDS YOU!

How would you like to experience the thrills and spills of working on ACE under the Project Trident job placement scheme? We're looking for a talented, enthusiastic and friendly young person to help us in all areas of magazine production, from administration to journalism. The ideal candidate will be able to learn quickly, work under their own initiative and under pressure, and possess an in-depth knowledge of Advanced Computer Entertainment. Get writing to: **ACE PROJECT TRIDENT, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU**

SEGA SURPRISES

Sega has launched two new controllers for its Master System console. The Handle Controller is a matt-black two-handed deck with



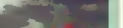
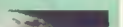
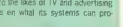
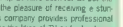
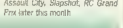
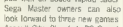
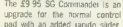
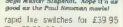
Get a handle on Sega's new controller

SYMBOLICS SIZZLERS

The ACE newsdesk - which doubles up as Rik's desk for all but the day we go to press - recently had the pleasure of receiving a stunning brochure from Symbolics. This company provides professional 2D+3D graphic animation systems to the likes of TV and advertising companies. So just feast your eyes on what its systems can produce.



Assault City on Sega Master



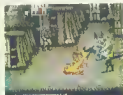
GOTTA VIDEO, WANNA CONSOLE?

Action Screenplay, the video magazine, is releasing a \$9.95 VHS video buyers-guide to consoles including the Nintendo NES, Nintendo Game Boy, Sega Master System, Sega Megadrive, PC Engine, Konix and Atari Lynx gamebooks.

ACE IN USA

• Check out page 18 for a full report on the US Winter CES show in Las Vegas.

• Sega is rumoured to be working on a handheld console in direct response to the phenomenally successful Nintendo Game Boy, the newly-launched Atari Lynx and



Golden Axe on the Sega 16-bit Genesis console

the just-announced NEC portable-PC Engine handheld consoles. The Sega console could have a wealth of excellent Sega co-ops converted to it immediately like Out Run, Space Harrier, Power Drift, Afterburner and Galaxy Force. No price or release details are currently available.

• Atari Corp. and Atari Games, the computer and coin-op companies that split in 1984 when Warner Bros. sold Atari Corp. to Jack Tramiel, have got back together in a deal to convert Atari Games' Tengen coin-op titles to Atari Corp. Lynx handheld colour console Confused? You shouldn't be. What this boils down to is forthcoming Lynx conversions of Hard Drivin', STUN Runner and Cyberball. Other possible conversions could include a regular whose who of coin-op classics Gauntlet, Road Blasters, Star Wars, Empire Strikes Back, Return of the Jedi, Indiana Jones and the



Shadowgate on the Nintendo NES courtesy of Seika

ACE ON THE TUBE



A scary solid pelican in Amiga Castle Master

On a warm winters day, Steve and Rick head out for Putney to visit the domain of Domark - and the local Malaysian restaurant.

Domark has a string of new multi-format releases due out over the next few months. Klax, Escape from the Planet of the Robot Monsters, Cyberball, Hard Drivin' Extra Tracks, The Spy Who Loved Me, Wings of Fury and Castle Master.

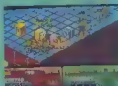
Featured in the ATEI show report on page 54, Klax is Tengen's latest coin-op release, a pseudo-3D Tetris-inspired tactical game. The interesting aspect to this Domark release is that it's the first time a coin-op developer has handed over a coin-op conversion to a software company six months prior to the coin-op's general release. Thus the coin-op and computer versions can go on simultaneously.

A Domark spokesperson told ACE, "I think this shows the level of co-operation between us and Tengen. Other Tengen titles, among other, soon are Cyberball, a futuristic 21st Century version of American football played by giant robots 20ft tall by 8ft wide, and Escape from the Planet of the Robot Monsters, a B-movie inspired arcade adventure with the cutest Shredded Wheat sprites we've ever seen!"

Also on the Tengen label will be the imminent release of the PC and Archimedes conversions of Hard Drivin'. Domark is also bringing out Extra Tracks for the 16-bit versions of Hard Drivin', no



7-4-4 later, the Twits are back and they're lean, mean killing machines



Escape from the Planet of the Shredded Wheat, sorry Robot



and on the Spectrum

price has yet been set but they're likely to be in the region of £10-£12.

Following in the Domark tradition of James Bond computer games, early summer will see the microconversions of The Spy Who Loved Me movie. The multi-stage arcade game approach will probably be used again.

Set in the Pacific War during 1944, Wings of Fury is the new Broderbund game from the States. You pilot an aircraft carrier-based Hellcat fighter bomber on a mission to knock out Japanese island installations in the surrounding 'warzone' in

game play consists of the normal horizontally-scrolling shooter-up formula enhanced by the novel approach of switching between long-shot and close-up views of the action.

Domark is set to release other Broderbund games during the first half of '90 and following the success of the Fantavision Amiga graphics package reviewed in ACE 271, the company also has plans to launch more utilities in the future.

Last, but by no means least, comes the first game from the Domark/Incentive deal featured in last month's news pages. Castle Master is newest incentive epic 'freescaping' arcade puzzle adventure now incorporating 3D solid polygons to spice up the logical thinking.

All these Domark games will be out for the Spectrum, C64, CPC, ST, Amiga and PC in the near future.



Spectrum Cyberball on 25th gridline



Helix for the Amiga Wings of Fury



How to leave hell in the coin-op version of Klax



Nintendo Game Boy and Watch systems from Micro Games USA

Temple of Doom, Super Sprint, Vindicators, Xybots, APB, Road Runner Escape from the Planet of the Robot Monsters and Rolling Thunder

- Mean Streets is a tasty-looking VGA PC graphic cyber-adventure set in the year 2033 from Access Leaderboard Software. It's also available for the C64

- Sega has just converted its Golden Axe hack'n/slash con-op onto the 16-bit Genesis (Megadrive) console.

- Seka has brought out Icon Simulation's Shadowgate Macintosh role-playing game on the Nintendo NES console

- Double Dragon is being developed for the Nintendo Game Boy handheld console by Tradewest.

- Tengen has released Rolling Thunder, Vindicators and Road Runner con-op conversions on the Nintendo NES

- If you buy a pack of 10 Sony 3.5" floppy disks you get a free "interactive demo" of ABC's Monday Night Football software game.

- Data East is releasing EA's popular Battle Chess on the Nintendo NES.

- The award for weirdest game title in America at the moment must surely be a toss-up between Hudson Soft's Princess Tomato in the Salad Kingdom and Kemco-Seka's The Bugs Bunny Birthday Blowout

- Activision is bringing out Malibu Beach Volleyball on the Nintendo Game Boy.

- Micro Games USA has launched a range of Game & Watch decks based on some popular NES games like Super Mario Bros., Donkey Kong Jr. and Zelda

- CSG Imagesoft is developing Dragon's Lair for the Nintendo NES.

BLASTS FROM THE PAST

What happened in the bygone months of March

1982

- £234-VAT buys your TRS-80 Model I an extra 96 ASCII characters

1983

- Vague Games is set up to produce games for the Spectrum, C64, BBC, Atari 8-bit, VIC20, Dragon, Cric and Texas TI99/4A

- Epson signs up Miss World Marjaretta Alvarez Lebron to appear on ads for its printers and HK portable computer

1984

- Samsung signs a deal with Clive Sinclair to assemble and distribute the ZX81 in South Korea

1985

- Freebird releases a £2.99 Spectrum compilation tape of the five worst computer games ever written called Don't Buy This

1986

- Activision buys adventure developer, Infocom for \$7.5 million

- The first batch of Freebird's Elite on the CPC contains a bug which makes the game unplayable

1987

- The Hanover Fair in West Germany sees the launch of the Commodore Amiga A500 and 2010, Apple Macintosh II and SE, and the Cambridge Computers' 288 laptop computer

- Thalamus releases C64 Delta shoot'em up with superlative Rob Hubbard soundtrack and interactive music loader.

1988

- ACE runs a competition to add the magazine for the day and is nobody actually applies!

1989

- At E3 exclusively reveals the Konix console

- Games developers Bullfrog admit to using Lego to design the game worlds in Populous

ACE PREVIEWS

A preview in ACE is more than just a screenshot and a caption: we actually get our hands on the games as they're being developed

the Amiga has a max. of 220, and an average of only 40.

ESOTERROR



Ian Haring, the designer of Ocean's Lost Patrol (take a look at page 28 for a recon preview), is also working on a fantasy shoot'em-up called Esoterror

Some very stunning graphics are supplemented by a speed-driven version of Space Harrier! Haring is still working on the crucial gameplay portions of the game and would love to hear your comments and suggestions, write to: Ian Haring, 4 Aberdeen Road, Redland, Bristol BS6 6HU



Oronslam's re-rip conversion of Sega's Scramble Spirits on the ST

Rob Hild is the 21 year-old programmer of the ST and Amiga versions of Scramble Spirits at Teque software development outfit. He originally started out writing boring 'C' programs but big biz manframes, but was made redundant last year. The ST version took him three months to develop, Amiga Scramble Spirits took five days! Although Hild immediately mentions the fact that everything - disk loader, keyboard/joystick/mouse reader, text writer, ST program logic, etc - was already "in place", all that needed to be rewritten were some of the graphics and sound routines. The Amiga version runs a lot faster than its ST counterpart - 25 frames a second as opposed to 17. This was accomplished through the use of the Amiga's blitter in the sprite routines. The original con-op version of Scramble Spirits had a max. no. of 4096 sprites on-screen.



HY-PERFORMANCE

ACE CHECKS OUT TWO PIONEERING HYPERGAME DEVELOPERS

Could the games programmer soon be a thing of the past? ACE meets two development teams who believe that in the future games will be coded by designers, using powerful hypermedia engines instead of machine code and assembler routines.

Fergus McNeill is a name that may ring a few bells. Back in the days when people still played text adventures, Fergus was one of the few game designers to make maximum use of The Quill adventure generator, producing games like *The Bogglers*, *Robin of Sherlock*, and *Bored of the Rings*.

New he's working on *Psychokiller* - Britain's second hypergame (the first into the shops will be *Herewith the Clues* from CRL - see pages 61/62). The game has been created using the same software development system (EGADS) as *Herewith the Clues*, but Fergus faced a far greater challenge. The scripting for the CRL game was already in existence; Fergus had to create his own.

This isn't as simple as it sounds. First, you're faced with similar problems to a film director. Visual material has to be recorded, digitised, and edited into sequences within the game.

This involves location shooting, expense and considerable hassle.

Then you have to change

roles and become a sound engineer. For the true multimedia experience, you've got to assemble your sound data (all digitised, in this case). Finally, you take on the role of systems programmer and use EGADS to knit all the parts together.

Of course, all that assumes that to start with you were wearing your script development hat, storyboarding the whole game. Easy, eh?

No, it's not easy, says Fergus, but the system (EGADS) is good and the potential is enormous. For a long time now, systems have been tailored towards pre-defined finished products, but EGADS is limitless. That's the upside. The downside is that being given so much freedom can be frightening at first - but challenging at the same time.

'Systems like this are also very easy to use, it only takes you ten minutes to learn - but when it

comes to dreaming up the best ways to use the system's potential, the whole process becomes very challenging'.

OSMIC FACTS

Games like *Cosmic Osmo* have yet to make a big impact in the UK, but it's only a matter of time. What do they involve? And why are they important?

You can find out more about hypermedia principles in this issue in our Hyperguide on pages 57-59. Basically, however, a hypergame is a product that contains lots of different elements linked together to form a network of video frames, sound samples, textual information and even discrete machine code modules.

The big hindrance for games enthusiasts at the moment are first the poor animation quality of many hypermedia packages and second the amount of disk storage required to put together a decent product. All that is set to change, however, as soon as CD-ROM becomes more widely accepted. Commodore's recent announcement of an Amiga with CD-ROM together with the low cost Headstart CD-ROM PC are therefore particularly important for gamers.

We have the software - soon we'll have the technology.

IT'S A RECORD

Alasdair Scott Godard, software developer at Pergamon Compact Solutions (PCS - see Guinness panel) and designer on the Guinness Book of Records project, feels much the same way about the new systems.

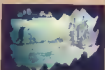
'You can't see nothing yet,' he asserts. 'But the trouble is we don't know what you are going to see! Whatever happens, however, we're going to have to rethink from scratch our ideas about computers, entertainment

Although slow to catch on,

the implications of hypermedia for games development are beginning to sink in. Stand by for hyperactivity..

PSYCHO KILLER

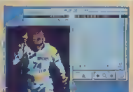
Psychokiller is designed to be a nail-biting horror 'à la John Carpenter type of game, with slight touches of Hammer' explains Fergus. Yers can break down in the middle of nowhere and a series of sinister happenings lead to the appearance of a psychotic killer.



Due to a shortage of staff in the coding department, the psychotic killer actually bears an uncanny resemblance to a digitised Fergus McNeill. The game is still under development, but will feature around 100 digitised screens together with numerous digitised sound clips.

One thing that's missing is animation, since that is yet to be incorporated in the EGADS system. As soon as it is, Fergus hopes to attempt a fully animated hypergame, using 'telescope' techniques for the movement. Originally used in the *Lords of the Rings* animated film, this involves digitising live subjects who are then printed over.

GUINNESS IS GOOD FOR YOU



Guinness Book of Records on CD-ROM - interactive techniques that will soon be used for games development.

Microsoft. Now there's a familiar name bringing fond memories of some superb US licensed products including *Defender of the Crown*, *Clods*, *Dungeon Master*, and *Imageworks' Xenon II*. What isn't quite so well-known is that Microsoft share offices with a company called Pergamon Compact Solutions. And they've recently announced the establishment of a new multimedia development laboratory, following a £5m investment from Microsoft into PCS. This could be the most significant news for UK gamers this year.

Basically it means that for the first time a UK software company with games expertise will have access to CD-ROM and CD-I expertise in-house. PCS have already pioneered many games-relevant techniques in their interactive version of the Guinness Book of Records. According to Microsoft boss Jim McKonochie, the decision to head for CD technology was 'very similar to the decision we took forty years ago to concentrate on 16-bit software'.



Jim McKonochie and Alasdair Scott Godard of PCS, forging the future of games software.

It was a huge risk at the time, but it has paid off. We're making the same decision now to build up our multimedia skills'.

We'll be bringing you regular updates on this emergent technology and its implications for games, during the coming year.

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ACE CONFERENCES

ACE will also be acting as a communications link between you, the readers, and software houses during 1990. We're setting up a series of ACE conferences in which readers will be given the opportunity to meet software houses and talk to them about their games (and you don't have to be polite either!) on an informal basis. Lunch will be supplied and admission will be free to subscribers, who will also receive priority allocation – a valuable bonus since space at conferences will be strictly limited. Each event will be fully covered in the magazine, so you could get your mug in the mag as a memento!

InterACE

Subscribers will receive, completely free of charge, a special quarterly newsletter put together exclusively for them by the ACE Team. This will bring you details of some of the topics that we can't, for reasons of space or secrecy (!) mention in the magazine itself. Subscribers will have the chance to contribute to it if they wish. With ACE every month, and InterACE every three months, you'll really be at the cutting edge of the computer entertainment revolution.

THE ACE

Subscribe – and the ACE Team will plunge you into a maelstrom of discovery and excitement. Reporting direct from the heart of the entertainment inferno, the ACE Team have ensured that their readers have been the FIRST to find out about many startling new developments in the games-playing world. Here's what you've been missing...

THE TRAIL-BLAZING PAST

ACE was launched in 1988 by a small team of dedicated computer entertainment journalists. They wanted to produce a games magazine that would for the first time, appeal to people who really look at their games seriously and who, like the ACE Team, wanted to go beyond game reviews into the world of advanced entertainment technology.

One year later and the magazine was outselling its rivals and being voted *Magazine of the Year*. In recent months, ACE has brought you exclusive coverage of



Hypergames, the game style that began with *Manhole* and *Cosmic Osmo* and is paving the way for CD-I entertainment – defined and described for the first time in ACE.

The Flare Micro – the state-of-the-art games hardware that later became the heart of the Konix console – revealed for the first time exclusively in ACE.

Interactive Compact Disk Entertainment – the Philips CD-I unit, previewed exclusively in ACE and due for release in the next few months at under £1000.

FM Towns – a 32-bit Japanese games monster with a built-in CD-ROM that comes a mean AfterBurner conversion and a staggering technical specification.



E STORY

New fACEs

pACE setting

One of ACE's prime roles over the next few years is to campaign for wider acceptance and coverage of computer entertainment. We've set up a broadcasting working party to liaise with TV and Radio on behalf of our readers and we'll be keeping you updated on our progress throughout the year.

ACE will also be running a unique reader campaign in early 1990. If you've got a copy of the relevant issue, you'll be able to take part in the largest computer games publicity exercise ever: don't miss it! What's more, if you subscribe, you can take part in person at one of the ACE Conferences: see the Subscribers' Exclusive box for more details....

The ACE Challenge - a £20,000 challenge to the hardware industry to give us a dedicated games machine which can deliver truly advanced computer entertainment. The list of the ACE Challengers will be giving us the full spec of their record breaking micro in the next issue of ACE.

Interactive Video Tape - a new games standard in the USA that is turning video tape recorders into powerful interactive game systems.

and much much more...

THE GLORIOUS FUTURE

By subscribing to ACE, you inherit a great tradition of in-depth coverage of computer and electronic entertainment, from the latest coin-op blockbuster to hypergames and MIDI music. Here are just some of the topics you'll be able to catch up on in forthcoming issues.

Born in the USA - an exclusive look at the latest state-of-the-art games software currently under development in the States for the new CD-I and DVI game systems.

Beyond Teletext - an ACE exclusive report from the heart of Ruotele on Soviet computer entertainment.

Inside the Machine - full technical details on the latest generation of Intelligent coin-op consoles.

Total War - an in depth examination of war-game psychology and the software both established and under development, that could make this the fastest growing games area of 1990.

plus a host of other exclusive, in-depth articles on the cutting edge of computer entertainment.

Ever since EMAP bought ACE, we've been preparing for ACE's best ever year...



We've now got **Steve Cooke**, the original editor who, in conjunction with Pete Connor, was responsible for the early success of the magazine. Pete will be supporting the magazine on a regular basis as a valued freelance consultant.

Steve knows the entertainment industry backwards. Not only was he one of the original Personal Computer Games team back in the early '80's, but he's also involved in script production for stage and film. His knowledge of these other industries will bring ACE readers exclusive highlights in the rapidly emerging world of CD-I and multi-media entertainment.

Rik Haynes

Rik is ACE's deputy editor, and the man who really keeps his finger on the pulse of the computer games scene. He was previously the Reviews Editor for the weekly magazine *New Computer Express* and his background of investigative journalism will be bringing ACE readers the latest developments in entertainment technology every month, maintaining the magazine's excellent reputation for breaking the biggest stories first.



Laurence Scottford

Laurence was chosen from over 150 highly qualified applicants (including many familiar names in the games business) because, as the new Reviews Editor, he demonstrated to us all that he was not only a highly experienced games player, but also a superb organiser. Each month, he'll be coordinating reviewers from around the country (and even from abroad) bringing you the authoritative reviews you expect from Britain's leading games magazine.



Jim Willie

Now that we've got Jim as our Design Editor, we'll be ensuring each month that you not only get the best coverage, but that the design of the magazine also meets your demanding expectations. Jim's an expert in desktop publishing systems and is rapidly developing an individual style for the magazine using the latest state-of-the-art DTP technology. The way ACE is actually produced makes an interesting topic in itself: you'll be finding out more from Jim over the next few months as he lets you into some of his graphic secrets.



SHORT 'N' SWEET

A few of the best zany bits...

Sprite Redundancies

Here are my sprites for my deal games machine. (aside: I hope you're happy with it)

Steven Hopkins, Leighton Buzzard

And this, we writers, is an oblique comment on the current state of games software!

The man with no name

My name is the name of one who is in the top ten and last with two wondering could you please help me next month, as my friends don't believe it was me! Please

Simon Howard, Cornwall

is done. I nameless poet!

Twelve year old genius?

I am twelve, I am an Atari 5.0 and in my spare time I use it for my new Friday which is technology and have written a 100 boxes of programs. Not all twelve year olds have a one bit brain

Matthew Crocker, Kent

I hope what? Should I not be reading *New Scientist*? You do "Oh ok"

Probably the best reviewing system in the world!

I was suddenly struck by a totally new idea for reviewing games. I asked my friends to give me a list of the best games they had played and then I asked them to give me a list of the best people they had played them with. I then asked them to give me a list of the best people they had played them with. I then asked them to give me a list of the best people they had played them with.

Matthew Kearney, Gravesend

I am the first, the best and the most beautiful people (I am hope!) and you're on!

Sanity?

Doesn't the term "sanity" of computers make one want to shove a chip in your eye and say I AM ME. I AM A BORN AGAIN CHIP BUDDY? Well no, the machine but it passes the time!

Paul Naylor and Nevil the Egg, Mansfield

I am on Earth are you on about?

The Big 10!

As the 10th year of a future time with consoles and 32 bit computers. July 1991 3.4m every year on the 10th decade of computing, may the show go on!

Mark Russell, Southport

Hi, Hi!

not really possible to predict exactly what the response to the machine will be like. The first thing to bear in mind is that the machine's Spectrum compatibility means that there are literally thousands of extremely good games already available for the machine, and many more being released each month.

Of course, if you wanted a Spectrum you would have bought one, and not a SAM. Software specifically written for the machine (apart from MGI's own packages) for some time. Most companies will probably wait to see how sales of the machine take off before they commit themselves. When that software does appear it is more than likely going to consist of existing Spectrum titles which have been scooped up to take advantage of the SAM's advanced features.

In short then, you haven't got yourself a write elephant, but you are probably going to have to be patient as far as software support is concerned.

THE TEXT ADVENTURE IS DEAD...

Laurence Scottford's comments in the opening paragraph of his *Future Wars* review (Issue 28, p.55) were "...the text adventure seems to have finally died a death..." The keyword there is finally, I can just see the massed ranks of arcade reviewers dancing a jig around the office.

Then he goes on to cite Level 9 as an example of the death of adventures. Level 9 have from time to time spoken about their writing arcade games. Then moving away from the genre is for their own reasons, not simply because of the "death" of the text based adventure.

Magnetic Scrolls and Infocom's illustrations are head and shoulders above the graphics of *Future Wars*, and coupled with the text, create a much better atmosphere.

And simpler, more sophisticated interaction? The joy of a text based adventure is finding out how an object works not simply OPERATING it from a menu!

I'm sorry to Delphine/Palace if I'm appearing to be hard on *Future Wars*. I'm sure it is a fine game. What I'm protesting about is the feeling that computer software must gravitate towards the centre. I can only hope this letter will start a debate as to what kind of industry we want, whether we want a choice of games with their own peculiar divisions of style, or whether we wish to follow the doc-

trine of "one style, one product, one customer".

Martyn Westwood, Interactive Technology

•Firstly Martyn, I think you do reviewers a slight disservice to imagine us leaping about the office celebrating the demise of the Text Adventure. My comments in the review were intended merely as observations - not as a personal expression of regret. I agree with your comments on the qualities of text-based games. I have enjoyed many myself, but I also feel that games like *Future Wars* have opened up the genre to a lot more people. What do other readers think? Meanwhile here is a lament for Level 9.

...LONG LIVE THE TEXT ADVENTURE!

What a disaster! Level 9 is about to bury their much praised text adventures. Adventures with great plots are selling adventures! How about trying a different approach. Level 9?

Jay Laa, The Netherlands

Jay we couldn't agree more. Having said that we anxiously await Level 9's future arcade style releases.

SINGLE-SIDED BLUES

Don't you think it is time that someone, either software companies or magazines, found out how many single sided disk drives there are still being used on the ST?

As the games get better and are taking up more disk space it is now leading to unacceptable levels of disk swapping.

Surely by now even those people with single drives have upgraded to a double drive.

If the software companies made their programs on double-sided disks they would save thousands of pounds on blank disks, and may be able to bring the price of the software down because of it.

I bought a copy of *Police Quest II* and it had three double-sided disks m4 and a note from Sierra asking the people with sin-

gledisk drives to send for six single-sided disks - now doesn't that sound a better system.

P.Hall, Harlestone

I am sure that there are many many ST owners who sympathise with your points. Almost every month we look at software which is ruined by the amount of disk swapping that becomes necessary.

You might be very surprised however, all the number of single-sided STs that are still in use. Remember that it costs at least £60 to upgrade an internal drive - and that is if you buy the cheapest available unit and fit it yourself!

Yes, Sierra's system is quite a good idea, but think how frustrating it would be for single-sided owners to have to do this every time they purchased a game.

Unfortunately there is no easy solution to the problem, so it looks like both camps will have to grin and bear it.

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Multiple skill levels, technically accurate head-up-displays, actual flight characteristics, multiple views, multiple targets, Black Box flight recorder, and complete weapons system are just a few of the features that set FALCON above all other flight simulations. Due to the unsurpassed realism of FALCON, it has been selected as the basis for a simulator for the military. Whether you are an experienced "top gun" or a novice pilot, FALCON is for you.

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- COMMODORE SHOW NEW AMIGA BEHIND CLOSED DOORS



I magine wandering around 18 aircraft carries (that's a mind-boggling 800,000 square feet) surrounded by the weird and wonderful offerings of no less than 1,400 major exhibitors. It's hell, but if you like it hot, hell is where you have to go.

What's Consumer Electronics? Pretty simply, if Dixons sell it, it probably qualifies. Telly, Video, Audio, Camcorders, Office Equipment, Keyboards... and Computer Software and Hardware. And it's big, BIG business with total over the counter sales of about \$43 Billion in 1989. That's a lot.

Of that, around \$3.4 Billion was accounted for by the home video game industry. That sounds none too bad until you realise that \$2.7 Billion of that was generated by the Nintendo system alone. The balance of the figure is made up of Sega and Atari ROM based sales - with entertainment software on floppy for other systems coming in at around the \$300 million mark.

On the face of it, that's enough to send the average Advanced Computer Entertainment consumer heading straight for the sick bag - I mean who the hell takes the bog standard Nintendo seriously as a state-of-the-art entertainment machine?

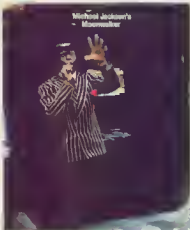
Judging by CES, everybody does. Nintendo drove home its dominance in this market by occupying almost half of the available space in the West Hall of the convention centre, where all the entertainment software exhibits were housed, the next biggest stand being that from Sega, followed up by that from NEC, Nintendo, Sega, PC Engine/TurboGrafx. The message? ROM rules, or at least that's what it looks like for the immediate future - in the words of one of the MD of one UK software company, "looking around here, you wouldn't think home computers existed".

Does this mean we are all doomed to be playing Super Mario Bros XII in years to come? Whatever hap-

At the dawn of the new decade, manufacturers from around the world gathered in Las Vegas to announce the latest, greatest, smallest, fastest, largest, noisiest goodies for the technofreaks of the '90s. John Cook survived to bring you this report...

pened to innovation, technical excellence and hoopy graphics and sound, you might ask? Well, the underlying message for those with their ears to the ground at CES was not as pessimistic as it might first appear.

The consensus is that optical disc technology - CD Rom, etc. - are going to revolutionise the home entertainment sector. But not just yet. The only home machine packing a CD right now is the TurboGrafx, but there are many others on the verge of release - the Philips CDD system for starters, several MS-Dos systems aimed at the home market, plus the original Amiga with a built in CD Drive, unveiled by Commodore to selected developers (i.e. anyone who cared to turn up) behind firmly closed doors.



Michael Jackson hits the Sega stand



Super Nintendo World Prix on the Genesis shows off the power of the system as convincingly as the coin-up aright that showed off Sega's increasing technical dominance of speedy 3D routines.

Only a fool (and they exist!) would maintain that machines such as these will not make a huge impact in the home market - with 600 MBytes to mess around with, you can store a whole bunch of very hres graphics and CD quality sound that cannot but impress Joe Public (whose letter appears elsewhere in this issue).

NINTENDO

Nintendo rules, OK! That was the message that was brutally rammed home at this show. Nintendo estimates to have sold around 26 million NES machines (Nintendo Entertainment System) in the US in just over three years. It's in 22% of US households and intends to increase that figure to 29% by the end of 1990. The company is spending \$30 million in advertising in the first half of 1990 alone, to that end.

The NES is simply a phenomena, which with the immediate success of the Gameboy, might well become a self-perpetuating dynasty.

There was much new software too for Nintendo and it was generally agreed that the standard of programming and graphics had improved significantly over the past year. What disappointed many however was the lack of imagination displayed in the majority of the titles. How many variations on Super Mario and Castlevania can their be? The answer is - a lot.

There is more sophistication at the higher end of the Nintendo ROM market, however. Games such as



Final Fantasy - an RPG with battery backed RAM in the cart, so you can save your game position. Shadowgate - a hit on 16 Bit for ICOM Software - has converted surprisingly well - rather better than Cinemaware's Rocket Ranger.

The UK team who is the big daddy of Nintendo development worldwide - Rare - were also in evidence. The company that was Ultimate Play the Game and mysteriously dropped out of the home computer market at the top have programmed around 40 Nintendo titles since, all for third parties. The guys must surely rate as the smartest (as well as richest) of all UK software publishers and developers alike.

Even beyond video games, Nintendo is firmly embedding itself into youth culture. There's a hit live action adventure/comedy series 'Super Mario Bros. Super Show' airing on 135 stations in the US,



plus the animated Captain N: The Game Master. There're movies featuring the Nintendo 'The Wizard' being the most prominent. You can eat Nintendo breakfast cereal, wear the Nintendo sweat shirts, hats, coats and jeans put on the Nintendo slippers, drink out of the mugs, cups and thermos flasks, sit on the Nintendo furniture and tell the time by the Nintendo clocks.

There's one thing for sure. When Nintendo decide to make the step over the Atlantic with the NES and the Gameboy - rather than the fragmented toe in the water approach taken at present - we aren't half going to know about it.

SEGA

Of all Nintendo's competitors in the US, Sega took like they have got the best set together here and now. With superior hardware in both the Master System and the Genesis, they are hoping, at the very least, to cream off some of the Nintendo market. Marking down the Master System to \$70 retail can only be a step in the right direction.

The real hopes for the future are undoubtedly

Out on the town at night - make sure you don't drink too much, or you might get eaten by the tigers in the lobby of the hotel.

In the last quarter of 1989, the Gameboy produced more revenue than the whole of the videogame industry in 1985. One million hardware units sold, three million carts sold. 5 million Gameboys are expected to be sold in 1990.

Wings from Cinemaware turned a few heads at the show, mixing sprites and 3D vectors in a novel fashion. A 11 be out on Amiga in May, with IBM and ST version following on.

Into the spotlight in Cinemaware's Wings, featuring on the Amiga.



New World Computing held a fun title on the Amiga - called Nucleus War. With strong cartoon graphics and a wacky theme - all based around a 70's card game - it's not to be taken at all seriously and looked like a bunch of laughs.

PORTABLE ENGINE SHOCK

Behind the scenes NEC was displaying the big shock of the show - a hand-held version of the PC Engine.

In a private meeting with selected developers the hand held was unveiled, in full working order. It undoubtedly blows away all opposition presently around.

Full colour screen about three inches across. True hand held size - about 8x4 inches. Full resolution screen - a true 400x240 display which would convert to a portable TV with an optional tuner attachment. And the most interesting news of all - fully compatible with existing PC Engine TurboGrafx software.

The downside? Battery-life, at present only three hours. Price? No announcement - but you'd expect it to weigh in at well over \$200. Timing? No announcement of release date.

But is there it works - and must be scoring the hell out of Atari. It's also interesting to note that NEC are now the only videogame producers with a system that works in the decades (there exists a JAMMA compatible board for the PC Engine) is on home console and is also a hand-held.



primed on the 16 Bit Genesis, now with over 350,000 units installed in the US. All Sega needs is the software base to show the machine off, so it's working on the solid base of its own arcade hit titles - such as Golden Axe and Super Monaco Grand Prix - and a sprinkling of strong licences, Spiderman, Dick Tracey (soon to be a Warren Beatty/Madonna hit movie) and Moonwalker from M. Jackson, esq.

In Genesis, Sega have the most highly specced videogame unit on the market right now, only history will tell if they can even begin to overturn the Nintendo monopoly with this performance advantage.

NEC

The TurboGrafx-16 for PC Engine is beginning to become a serious contender in the videogame market. In a large booth it was proudly displaying an extensive range of new titles, many of which had not been seen before.

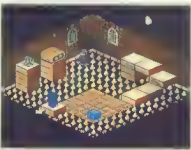
NEC's big launch (apart from the portable Engine - see separate panel) was the announcement of the CD-Rom player for the PC Engine. On display was Monster's Lair with a boppy CD sound track - but more interesting was the Cinemaware production of It Came From The Desert, which will overlay live video action featuring real actors with computer graphics in a CD version of the game.

Cinemaware can integrate about 20 mins of video action in with the existing game - and the initial effects looked very interesting indeed. On a separate rack, Cinemaware are also contracted to produce the whole of the TV Sports range for the PC Engine - taking advantage of the multi-player capacity of the machine. Five player TV Sports Football? Yum!

The NEC CD-Rom is the first optical product to make a big splash in the entertainment market - the industry agrees that one day, all games will be made this way - but isn't confident that the PC Engine in its present incarnation is the hardware platform to take it all the way. But it's a leap forward and congrats to NEC and Cinemaware.

ATARI

The fat cats of Atari had elected to take a suite at the Mirage Hotel (complete with white liggers in the lobby), away from the show floor. There, it was strongly push-



Power Golf on NEC's TurboGrafx 16/PC Engine



Remember this? Nolan Bushnell's Ping - the game that set the ball rolling in more ways than one



The advertisement...

Gateways are into serious subliminal programming, with its Mindvision™ series of products. Here's a hint to what it's selling: "Finally there's justification in spending endless hours in front of the TV! Yup, what Gateways will sell you

The 520STFM was relaunched at a new lower price of \$500. Regarded as dead by the game publishers, the ST needs this boost to give it any chance in the US marketplace.

A number of UK development teams have now become registered Nintendo developers - this is an interesting effort programmed by Software Creations based in Manchester - a Knight Lore style game called Solstice



... the effect: gamers also sit in a world of synth sound and flashing lights



Big words for Geoff Cusper - who else could lift this 3 kg 3 monitor?

is a black box that fixes onto your VCR and will play a tape of positive reinforcements onto the TV program of your choice.

You can control how often the messages are flashed up - indeed you can adjust it so the frequency is just below the conscious threshold. Now it looks like you're watching normal TV - only say Gateways, your subconscious is being bombarded with positive messages and/or images of your choice.

Don't giggle. When subliminal advertising was tried out in US cinemas in the 50s, it resulted in vastly increased sales of cola and popcorn even though the audience didn't realise what was going on. Spooky, huh?

TUNE IN, DROP OUT

Mush sister is the MC2 which comes in a kind of New Age walkman. Imagine a walkie with built in shades. Shades that block out the light from outside and generate patterns designed to relax you. Combine that with some far out synth music coming at you through the cans and you get the idea of MC2. I have no idea if this does you any good or not - but watching rows of execs sitting around in deck chairs, just tuning in and dropping out had to be the most bizarre sight of Vegas CES.



This little box can take control of your mind and turn you into drooling slave to technology. That's the tech as public man Dastagoo, however, reckon it's 'the most advanced audio-visual subconscious programming in the world'.



Visual messages flashed on your screen by Mind Vision can be visible, obscured, or completely invisible.



Pinbot running on the NES

ing the Lynx handheld with reports of very promising first marketing in the New York area around Christmas, with the full allocation of 70,000 sold.

Tiermel claims they'll sell another million in the next year. It's fair to say that the industry is sceptical. Being the only colour handheld was a big plus - now NEC have spoiled that deliberately and quite savagely with the burn of, on launch, having an established software base of PC Engine software.

Is anyone going to shell out for a Lynx knowing that the NEC machine is around the corner? More likely, they'll buy a Gameboy while they await developments.

COMMODORE CD-ROM

Commodore was giving nothing away at its modest show floor stand, but in the depths of the West Hall car park, tucked away in an unobtrusive prefab, software producers were being shown a major development of the Amiga.

Basically, rumour has it to be an A500 with a difference - out goes the keyboard (as an optional extra), in comes a CD-Rom drive. This drive allows you to read CD discs, complete with a capacity of 550-600 Mbytes of data. That's equivalent to around 700 normal Amiga floppy discs. And you could almost get a Sierra game on that!

Expected to be shipped in Europe first, later this year, this is an exciting development of the Amiga. More details as they trickle out.

COMPUTER SOFTWARE

OK, so the show was dominated by consoles, more consoles and yet more consoles, but there were still the odd few people out there on the show floor doing it how we used to - on floppy.

The long, long, long awaited Heipoon from 360 Pacific finally made it to market - and looks the finest strategic level simulation to date. Out now on IBM - to be on ST and Amiga in the fullness of time.

Best PC Graphics of the show had to go to Lucasfilm, and the job they've done on Loom, but in all, it wasn't a great show for entertainment software on floppy. As it goes back to kick its wounds after the pounding by ROM - expect it to come out fighting in Chicago in June!

30% of Gameboy users are over 18 years old, half of that over 25. There's an almost 60/40 split between males and female here too. An avalanche of software is being developed to cash in on that base - from bog standard Invaders, to complex NFL Football games.



PINBOT running on the NES (with that very backward RAM as you can guess) is a step in the right direction for ROM software designs - but you line out on the graphics com.

Remember last month's Sifted End piece in which Steve Priddle of Commodore said the company had a secret weapon against the Japanese? The answer would lie in a massive reworking of the car park around the salesmen of cartridge software for the 64. Is this Commodore's answer to Nintendo? Plug-in software for the 64? Now that it be interesting if it's true.



Shooting live action for Cinemascope's It Came From the Desert on CD.

When there is no room left in Hell...
...dead people come back to Earth

ZOMBIE

The nightmare has just begun

For mysterious reasons, dead people come back to life to feed themselves on the flesh of human beings. The Earth is inhabited by millions of Zombies, who are spreading terror, and by gangs of hooligans, who are ready to do anything to survive. Yet four people didn't lose hope and decided to run away to new horizons.

What a great game! UBI SOFT have taken a video nasty and an arcade/adventure, and combined them, coming up with a real winner in the process. Moving your four characters around the building, trying to find a way out, all the time fighting off attacks from zombies, is very atmospheric. There are some good puzzles to work out and a hell of a lot has gone into the game. By all

means, get hold of this game."

"Everything is nice and detailed, with the background graphics looking particularly effective."

— AMIGA



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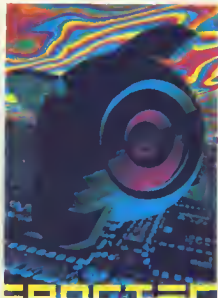
UBI SOFT

Entertainment Software



Amiga screenshots

Digital Bat Fantasy



If it's printed in red then you can find out more about it in our Hyper guide on page 57. Just look for a box with the same title as the highlighted word.

Batman Digital Justice © 1995 DC Comics Inc. All Rights Reserved

Welcome to the
entertainment
medium of the 21st
Century!
Rik Haynes flies to
New York for an
exclusive ACE inter-
view with the creator
of the world's first
interactive comic

Pepe Moreno is a 35-year-old Spanish born artist working and living in a crack-dealing neighbourhood of Manhattan. Not content with creating the entirely computer-generated *Batman Digital Justice* comic book, he is now using the book's digital data to produce the first interactive hypercomic.

HYPERACTIVIST

Moreno is totally absorbed in the possibilities of high technology and its application in the mediums of art and entertainment. "I'm more a futurist than an artist. I sell the future to corporations," explains Moreno. "I've been after hypermedia for years, the idea is to finance the *Batman Digital Justice* hypercomic as a concept project."

"We're trying to bridge the comic book market and the computer game market - we hope to make this an industry of its own. I have no problems with competition but nobody else is doing this. Everybody knows it's going to happen - but the market isn't there yet."

The *Batman Digital Justice* computer-generated comic book and hypercomic project was started about 18 months ago when Moreno first entered negotiations with the holder to

the Batman rights, DC Comics, part of the giant Warner Bros. corporation. But why Batman? "Batman is a very strong cultural icon with international appeal. I chose him because I wanted to reach the mass market - Batman's hype will establish the technology a lot sooner."

"My plan is an overall tactical strategy. The use of a computer was a conscious decision because it's all digital data, and digital data is very easy to manipulate. I'm an integrator - combining separate elements into one workable system."

COMICS ON SCREEN

The traditional comic book takes about six months to develop, *Batman Digital Justice* took 18. "The way I portray the story is in a cinema-style which has more atmosphere than a normal comic book. More like movies on paper."

The *Batman Digital Justice* hypercomic is pitched between passive and active user-interaction. "Too many computer games rely solely on competing. Interesting characters and motivating storylines are just as important factors as playability. With the hypercomic you'll have a more dimensional experience than you would with either a comic book or movie. There is too limited a space in a comic or movie to build or develop a character. Our development of interactivity and the user's access to all manner of information through a Hypercard environment will create a far more complex and entertaining medium."

"Cyan's *Cosmic Osmo* hypergame on the Macintosh was fully interactive but didn't have much atmosphere to it," slates Moreno.

The first versions of the *Batman Digital Justice* hypercomic are being developed for the Macintosh and PC micros on CD-ROM. "The Next machine is the ideal machine for my work because it already has the

"Gotham Megatropolis. Sometime into the next century. Welcome to future land! Take a ride on the progress express. Around you is an apparently perfect world -- but this is a 'make believe' world with vengeance, a world with no soul and a heart that beats in binary code. One or Zero -- God or the Void. A complex and wired world dominated by a tyrant code. A computer virus from long ago that has become the world's first Digital Dictator.

The only hope is a myth from the past, from a time of legend and superstition, long before the virus plagues. A new kind of hero, a program of 'clean' code and pure memory, a program written by a legendary crime fighter... A digital hero, one that can restore digital truth -- Digital Justice"

"Progress doesn't
give explanations to
anyone."



internal player," but Moreno will cater for any machine capable of handling a CD device -- if the demand and potential market is big enough. He's also interested in the new CD version of the Commodore Amiga launched at the Winter CES Show (see page 18 for a full show report).

The Macintosh hypercard will be complete within six months. Moreno is currently developing a Hypercard application to drive it and is also working on its audio and animation aspects. "I don't know much of the core technical stuff, I act as a kind of director. We're going to put in various soundtracks and sound effects, and animate various parts of the images. You'll be able to freeze it any time and go backwards or forwards through it at will. There will be different areas like the Media Tower and Mayors Residence to give you a proper feeling of where you are in this fantasy universe. Instead of speech bubbles, the characters will speak with dubbed actors' voices and the hypercard will be language independent -- it will contain three of four language tracks for English, Japanese, German, French or Spanish."

There are also plans for a CDi version of the Batman Digital Justice hypercard, "as soon as Warner Bros. has finalised negotiations, I'll be getting some of

BRING BACK LOONY TUNES

Moreno is influenced by the classic American animated cartoons of the 50s. "I miss the the old Warner Bros. Loony Tunes cartoons. The Japanese have never understood what not berating a character is because it's not in their culture. The Japanese factory are however efficient or reliable, can not reproduce this. The cowboy maverick individual is not part of the Japanese culture. The opening sequence in Roger Rabbit is back to the all American cartoon -- that's what it's all about. Hopefully computers will bring back house-made cartoons.

those CDi units over here. I'm also in personal contact with Sony in Japan."

SEX, LIES AND CDi

"Hypermedia is where it's at," enthuses Moreno. "Imagine an electronic Hypermedia version of ACE magazine. You load it up and see the cover. This cover may have a little bit of animation to bring the point of the cover or articles to the fore. You go to the content pages. You click on the Japanese icon - the text is all translated into Japanese. You click on any article you like. Maybe it reads the article to you or scrolls the text in a window. You can read the article



"I hope there's some-
body out there trying to
beat my ass -- that
would be nice."



Moreno's HyperCard illustration won him first prize in the 1989 Macintosh Illustration Contest.

THE BOHEMIAN TECHOCRAT

Moreno was born in Valencia, Spain, and spent most of his childhood hooked on weird and spooky art. After brief spells as a soldier in the Spanish Army stationed in North Africa and a European travelling DJ, Moreno set out for the USA in '77. Over the next five years, Moreno got actively involved in the punk scene, playing bass in a punkabilly band — while contributing numerous illustrations to *Elle* and *Vampiro* horror magazines. He also published the counter-culture graphics magazine *NART* (No Art) and had several short stories published in *My Metal* and *Epic Illustrated*. In 1982 he moved from San Francisco to New York — driving coast to coast in a '67 red Cadillac — and produced three widely-lauded graphic novels: *Rebel Joe's Air Force* and *Gene Kong*. He then switched to animation, designing live-action sets and mutated characters for three US syndicated series: *Thundercats*, *Tiger Sharks* and *Silver Hawks*. In addition, Moreno illustrated V-commercials for *Commodore* and *Transformers*. The hires, collaborations of the Amiga and the Macintosh fueled a creative renaissance for Moreno, making in the *Batman Digital Justice* project.

while simultaneously accessing other articles for cross-reference. You click on a photograph and a two video comes on or a playable demo of a game starts. There is so much video footage these days which doesn't get used. You could be connected up to a worldwide network for real-time updates or communication with other users. The potential is limited only by the imagination."

"This stuff is happening already, they used HyperCard during the last elections. There were so many candidates and mass of related information that an TV anchorperson could easily make a mistake during a live broadcast. So they put all the candidate data into a HyperCard stack. You could click on the name and it would bring up what that candidate said in their last speech or TV appearance."

"People who have the money already use hypermedia."

DIGITAL ART

Moreno proudly proclaims, "digital is the art medium of the future."

"The essence of art is to communicate and motivate society through whichever medium. What you want as an artist and where your imagination takes

"You're on your own
not trusting anybody —
that's how break
through's come about."



you're on one thing, it's quite another matter what the market will bear — it's a very important and difficult balance. Digital is the best medium to maintain the quality of the original concept throughout all the creative and manufacturing processes of producing a consumer product."

"I act as an art director and the computer does all the labor. I've become a better artist, with greater effect. It takes twice as long to produce art on a computer, but the results are like it took twenty times as much. If you're a methodical person you can cut the time in half."

"The good news about digital art is that it's sneaking behind the censors. Comics have a heavy censorship burden to bear, they're perceived by the Americans as pure kid entertainment. If they mislead some adult content people think you're trying to pervert kids. We're trying to break the norm — giving it a broader appeal. We can do this today because computer generated entertainment is difficult to control. But what about tomorrow?"

FUTURE SHOCKS

"In the future we will develop the computer-generated comic book and hypercomic all the same time — when we reach this stage I will probably be off doing other things."

Future artists will preoccupy themselves only with the concept — the raw essence of the concept will then stay alive throughout the process of making a product. Writers will create the concept as raw data and run that raw essence through Artificial Intelligence (AI) software to produce the story. This AI software will be able to take in any story requirements. You'll be able to create your own stories without having to rely on Hollywood or TV script writers. The fictional universe will be constructed by building a digital set. You'll build a whole universe in 3D, including characters, vehicles, and buildings. It's a very time-consuming effort, but once you have all these 3D models constructed from a logical space sense, you can build the story by just doing camera pans through different places while retaining the same relational perspective. I did build some of the environments for *Batman Digital Justice* the way but I would have had to build the whole of Gotham City. It's a great effort in the beginning, but you can turn that raw data just as easily into an animation as a static image. The idea is to build a digital set, then just let the electronic camera go anywhere in that fictitious universe.



"Are you going to ignore the art medium of the next century?"

CANVAS OF THE 21ST C

"I use a great deal of art programs, with about four specially preferred packages. My approach is to use a suite of commercially-available off-the-shelf software tools. The bottom line reality when you use the Macintosh is that no one single program can do it all."

"I hope to encourage software developers to create the tools to keep up with me."

The *Batman Digital Justice* comic book has 114 pages with 88 pages of storyline produced from 200Mb of clean data. Moreno started with the traditional thumbnail sketches to illustrate the story. He then used 3D modeling programs - Adobe's Super 3D and Pro3D - to create the buildings, machinery and backgrounds. Human characters were drawn on paper, scanned into the Macintosh, and touched up using Letraset's Image Studio. EA's Studio 8 was used to combine and colour the images. The pages were laid out on Quark XPress - ACE also uses XPress to lay-out all the editorial pages. Grupo Anya's colour separation software was used to produce the film.

"I originated the data on its own, basically each panel is a painting. The foregrounds and backgrounds are created separately, then assembled into panels



and pages at a later stage. As I was finally going to print, I optimised every single picture to have the maximum amount of colours. I have 256 colours per page - I had to economise on data because the bigger a file is, the more hassles you have to go through. A typical page takes 400K/500K."

"An 88 page story used to require 88 pages of artwork. With resolution independence, which came in at the later end of the *Batman Digital Justice* project, we could make the book go from 80 pages to 88 pages and have all these additional things on top of cinematic plays like close-ups of eyes and establishing shots. Because you have the same data, you can travel around camera-wise. Nowadays if I wanted to do an 88 page book, I would only do 40-60 of raw data which could then be manipulated in a variety of ways. The art is rendered with detail. One panel could turn into five by focussing on individual details contained in the original image by establishing shots, close-ups, etc."

Moreno uses \$60000 worth of hardware to create his works of digital art, including two 8Mb 24-bit palette Apple Macintosh II computers with shared data file link via Apple Talk. Mass Storage 45Mb removable hard-drive, b/w and colour scanners, laserprinters and a RasterOps colour monitor. The *Batman Digital Justice* data, including backups, fills 10 45Mb removable harddisks.

Moreno's constant upgrading and investment in new software and hardware does ultimately pay-off though. "If I were to do a sequel to *Batman Digital Justice* it would take me half the time..."



"I don't care how long it takes or how much I burn myself to death, I'm going to do this product."

DO ARTISTS DREAM OF ELECTRIC SHEEP?

"My friends and I are going to turn my flat into an electronic publishing multi-media space. I want to integrate our visual and audio talents. This creative sweat bag is what really makes things happen."

"I believe the whole political change in the Eastern Block has more to do with personal computer presence than anything else. They have the perception that if they don't catch up now they never

"People shouldn't be threatened by new technology. It's there to enhance their lives."

"Hi definition TVs will have built in computer chips 20-50 times more powerful than the Macintosh."

"\$8000. Your remote controller will become more than a channel selector. It will become a mouse."

"You'll be able to interact with what's happening on screen."

"I'd like to see all the 3D models I create sent through the wires to a computer mill which would do sculpture as manufacture a toy."

"Advances in optical medium and LCD technologies will make portable interactive electronic comic books feasible in two to three years time."

"With 12 million houses all entertainment to film - art and entertainment will become the key industries of the 90s and beyond."

"This stuff has got to be around in the year 2000 - I can't imagine it otherwise. Time is my only problem, I don't have enough of it."

NEW! FROM ENCORE...

BEYOND THE ICE PALACE

Spec. Cass. 2.99

C64 Cass. 2.99

Ams. Cass. 2.99

Release Date 7.3.90

© 1988 Elite Systems Ltd

IKARI WARRIORS

Spec. Cass. 2.99

C64 Cass. 2.99

Ams. Cass. 2.99

C16 Cass. 2.99

Release Date 21.2.90

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WONDERBOY

Spec. Cass. 2.99

Ams. Cass. 2.99

C64 Cass. 2.99

Release Date 26.3.90

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ENCORE

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WS9 8PW England Telex 336130 ELITE G. Companies Ltd. Tel. (00223) 747405

LOST PATROL

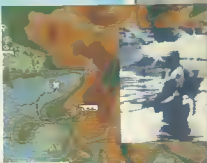
As OCEAN goes on a 'search and destroy' mission in Vietnam, Rik Haynes volunteers for a special recon preview

June 1965 a US helicopter crashes in the remote central highlands of Vietnam, leaving only seven survivors. They have little food or ammunition, no radio, and need to find a way to cross 58 miles of a wilderness that is alive with enemy soldiers and booby traps. That was the good news, the bad news starts here.



A Vietnam '65: a picturesque country, but a very dangerous place for an inexperienced American soldier fresh from boot camp

Choose your way, decide on starvation food rations or get dug in front of a sequence of lighted frames depicting Hollywood's vision of the Vietnam conflict



LOST PATROL

Your squad's morale and strength is lacking OK, but as leader of the patrol you'll soon have to make some tough deployment decisions

Lock 'n' load, let's head-out. The M16 Slimline calibre M16 assault rifle weighs 3.73kg and has a max range of 400m



A If only the enemy were as easy to spot as the VC (Vietnam Communist) were. Most of the VC soldiers there spent a lot of time in the Vietnamese jungles

WHERE'S THE ACE VERDICT?

You may not revisit *Lost Patrol* elsewhere. Although AGE played the same version of the game shown to all the press, we decided *Lost Patrol* was too incomplete a stage to actually revisit it. We only review finished games – the versions of the games you actually buy.

The pre-production clips of *Lost Patrol* were played and warmly received, but the crucial playability ingredients were still being hammered in off the security sequences. In addition, the "wind effects" were in a separate program waiting to be hooked into the game — some of those FX may be missing in the Real version, or in some of the game's graphics screens. Conversely, these factors could make or make a game. We have not assigned ratings to a predicted future issue in this series of *Lost Patrol* to assure issues of AGE will have more information after we've played the completely finished game. In the meantime, here's a preview on what we've found so far:

Despite being a different concept and visual effort by Ocean and Shalder Developments, Lost Pat is fully unique between two completely different game genres: strategy & arcade. The way game is to be the game's ultimate downfall.

"In World War Two the average age of the combat soldier was 26. In Vietnam he was 19."
19 single by Paul Hardcastle,
1985

A sense of tranquility, but keep an eye out for punji stick baoby traps—concealed underground wooden spikes or nails a high trap the victim's foot, piercing the foot and leg.

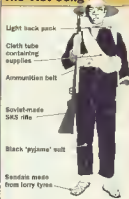


RELEASE BOX

AMIGA	£24.99	IMMINENT
ST	£18.99	IMMINENT
NO OTHER VERSIONS PLANNED		



The Viet Cong



The Viet Cong or Vietnamese communists developed from the Viet Minh who fought with the French for its independence during the first Indochina war. They had no official uniform but many wore the black pajamas, white armbands were popular among the peasants of Indochina. The Old Men, soldiers they were were made from poor, lazy boys and over the shoulder they wore a cloth sash which contained up to a month's supply of food.

NAM'S HISTORY OF HORROR

- After World War Two, France attempts to reestablish its **colonial empire** and **reclaim** its **former colonies** in order to **prevent** independent nations of **unstable** **Latin** and **Asian** countries
- In 1950, the US government starts to **grow** economic and military aid to France to **win** the Vietnam campaign
- In 1954, the **Geneva Conference** in **Switzerland** forces Vietnam to be **officially** **divided** by the **Soviet Union** and **France's** **Republic of China**
- by 1954, the Americans are **back** 78% of the cost of the French war effort in Vietnam
- Numerous **French** **defeats** in Vietnam – **culminating** in the **humiliating** **loss** of its **territorial** at **Gene** **Paris** (1954) – **France** is **forced** to **agree** to a **ceasefire** in May 1954
- **France** is **split** into **two** by a **Demilitarized Zone (DMZ)** along the 17th Parallel
- The **communists** are **based** in **North Vietnam**, the **Americans** **back** the **anti-communist** government **run** in the **South** (later called **South Vietnam**)
- The **Vietnam War** starts in 1955 as an **insurgency** **erupts** in the **Republic of Vietnam**, **South Vietnam** with **Americans** supported by the **Democratic Republic of Vietnam** (North Vietnam)
- The **North Vietnamese**, **insurgents** are **known** as **Viet Cong** (VC) or **North Vietnamese** **People's** **Army** (NVA) **decides** to **increase** the **number** of **American** **troops** in **Vietnam** but **does not** **initiate** **combat** **operations**
- **after** 1955 US military **shrinks** in **South Vietnam** goes to **around** 11,000
- In 1964 the VC kill and **abduct** more 11,200 people – **their** **goal** was to **grow** from 350,000 to 750,000 and **win** 1000 political prisoners
- **South Vietnamese** VC insurgents are **stopped** **because** a **series** of **miss** in **North**, **collectively** **known** as the **Ho Chi Minh Trail**
- In August 1964, American **troops** are **attacked** by **North Vietnamese** **forces** in **the** **Gulf of Tonkin**
- The US begins a **“strategic”** **escalation** **campaign** in **North Vietnam** known as **Operation Rolling Thunder** (between 2nd March 1965 and 1st October 1968). During 1965, the **Americans** **use** 148,000 to **mount** **missions** **against** the **North**
- In 25th August 1965, the **1st Air Cavalry Division** (ARVN) **arrives** in **South Vietnam** with a **complement** of 15,575 men and 400 helicopters
- The **North Vietnamese** begin the **Tet Offensive** during the **Lunar New Year** Tet festival in January 1968. Over 70,000 VC and **North Vietnamese Army** (NVA) **soldiers** **attack** 37 of **South Vietnam's** 252 provincial capitals, control 17 capitals and **self-govern** 70,000 civilians, **are** **evacuated** **between** 39,000 and 52,000 VC are **killed**
- **Historians** **see** talks **between** the **North** and **South Vietnamese** **“commitments** **converge** **in** **Paris** in May 1968
- In 1968, the US **combat** **soldiers** **have** a 1 in 55 chance of getting **killed** during the Tet Offensive
- American **resupplyment** **plan** in January 1968 with 54,000 US troops **evacuating** **South Vietnam**
- In 1970 the number of reported **drug** **cases** in the US **increases** **because** **Vietnam** **was** **in** 1958. **Drugs** **used** **include** **heroin** **and** **marijuana** **and** **heroin**
- **Along** **all** **the** **American** **drug** **combat** **forces** **are** **depleted** **from** **South Vietnam** **from** **1970**
- **April** 30th 1975, **South Vietnamese** **government** **surrender**

WE AND JIM CAN LIVE
 THE UNMILITARY
 SUPPORT NUTS T WIN
 SOME NAM MOVIE AND A
 VCR TO PLAY EM IN

COMPETITION

GOOD MORNING VIETNAM!

ALL YOU
 HAVE TO DO
 IS...

Here's a once in a lifetime chance to
 snatch up some recent 'Nam videos,
 together with your very own
 Video Cassette Recorder

Of late there has been something of a revived interest in Vietnam. The United States seems to be finally coming to terms with the full horror of the war it couldn't win. A whole spate of movies from Coppola's *Apocalypse Now* to Kubrick's *Full Metal Jacket*, and Stone's *Platoon* have attempted to exorcise the ghosts of Vietnam that still plague the conscience of the American People.

There have also been a number of computer games based around the events in Vietnam. Ocean were responsible for bringing us the superb *Platoon*, based on the film of the same name, and have now returned to the Vietnam

theme with the impressive *Lost Patrol*. (See our detailed preview of the game on pages 28 to 30.)

Even since the company's inception, Ocean has gone from strength to strength. As a leader in the 8-bit market Ocean were quick to take up the challenge of producing equally impressive 16-bit software (although they have never forgotten their commitment to older machines). Recent well-received releases like *Batman* and *The Untouchables*, as well as adventurous titles like *Lost Patrol* are an indication of the continuing growth of one of Europe's most respected software houses.

answer the simple questions below. They are all intended to test your knowledge of 'Nam movies, but to give you a fair chance we've given you a choice of three answers to each one.

Mark your answers on the back of a postcard, together with your name, address, and telephone number. Send your completed postcard to:

**ACE VIETNAM COMP,
 PRIORY COURT,
 30-32 FARRINGDON LANE,
 LONDON, EC1R 3AU.**

- Who was the star of the film *Apocalypse Now*?
 a) Charlie Sheen
 b) Martin Sheen
 c) Emilio Estevez
- Who starred in the film *Platoon*?
 a) Charlie Sheen
 b) Martin Sheen
 c) Marlon Brando
- Who said 'Good Morning Vietnam'?
 a) Chevy Chase
 b) Steve Martin
 c) Robin Williams

THE PRIZES

The first name to be drawn out of the hat will win the following goodies:

- A high quality VHS Video Cassette Recorder
- And these great films on VHS format video:
 - Platoon
 - Full Metal Jacket
 - Apocalypse Now
 - Hamburger Hill
 - Deer Hunter
 - Good Morning Vietnam
 - Green Berets
 - Uncommon Valour

Rules

- The closing date for entries is 1st March 1990.
- Employees of EMAP or Ocean are not eligible for entry.
- No cash alternative can be offered for the prizes.
- The editors' decision is final and no correspondence will be entered into.



LOCK & LOAD



AFTERBURNER — You've played the arcade smash — now experience the white-knuckled realism of a supersonic dogfight at home!

Using your heat-seeking missiles and laser anti-aircraft fire, can you be top gun against supersonic swarms of alien fighters? The joys of lock-on enterprise's LTD.



WOLF

OPERATION WOLF — Not only has all the action and game play been captured, but so has the excitement, making it one of the most satisfying and complete shoot-'em-ups to have appeared in a long time! ACS Licensed from C. Taito Corp. 1988



DOUBLE DRAGON — Join in deadly combat with the savage street gang of the infamous Shadow Boss. Use whatever weapons come to hand as you pursue the gang through the slums, factories, and wooded outskirts of the city to reach the black warrior himself for the final confrontation with the Shadow Boss himself!

©1988 Mega-Entertainment International, Inc.

DOUBLE DRAGON

HIGH CALIBRE GAMES IN ONE PACK FOR YOUR ATARI ST/AMIGA

ocean

SCREEN TEST

ALL NEW PIC CURVE POWER

The PIC - Predicted Interest Curve - is the most sophisticated reviewing tool around. And now it's entered the 90's.

We at ACE knew you *don't* just play a game - you *experience* it. The newly upgraded Predicted Interest Curve is the only review system that takes into all important factors into account.

The PIC Curve has been redesigned to immediately give you the info you need at just a glance. To back up our instant appraisal there is an expanded 30 depth dimension at each stage of the game's playlife. The curve is divided into six sections, indicating the player's skill level after one minute, one hour, one day, one week, one month, and one year. But the info you need is right there (just what your interest level will be at any given time (although that's obviously important to *you*)).

For example, if high one minute rating means that the game must look fantastic and get you all excited from the word go. That means it's probably a good game to show off to the neighbours - after all, they probably won't go to pay attention for much more than a minute, when which they'll go back to drinking coffee and making rude remarks about those awful hostile game the boys play these days.

The minute, hour, and day ratings can tell you a lot about a game too. If there's a dip here followed by a rise, you've got a game that may take a bit of getting into - not recommended. If it stays flat to go down to something quick and easy. Alternatively, the graphics may put you off for a while until the gameplay starts to grip. Check out the PIC comment for more details.

Finally, you've got the month and year ratings. The better a game holds up over the time, the more deserving it is of your hard-earned cash.

PIC curve construction takes a lot of playing on the part of ACE reviewers. PIC curve analysis is an art in itself. The reward is knowing just what you're getting when you make the decision to splash out on *Mutant*, *McDonald's*, *Geometric*, or *Canoe* - this month's 300+ ACE rated examples of advanced 16 bit software technology.



We've also enlarged the PIC commentary section beneath it. This gives us more space to tell you exactly what it's like to unnerve your game, load it up, and play it - giving you those essential snippets of information and reactions that determine whether or not this is a game you have to buy. The New PIC Curve - going straight to the heart of the Games Experience.

You can play Infogrames new latest release on computer or boardgame. We chose to review the Amiga version of **Full Metal Planet** on page 36

UPDATES, UPDATES, READ ALL ABOUT 'EM!

Chase HQ and Bomber: lustre C64 conversions from Ocean and Activision, and Queen's Operation Thunderbolt blasts onto Spectrum - all on page 53.

THE ACE REVIEWING SYSTEM

PIC CURVES

To enable fairness to the ACE reviewing system charts the interest level that a game stimulates over a period of time. The curve is accompanied by a comment to explain why it is the shape it is. Find out more in the PIC Curve Power panel on this page.

Each review also carries special Version Boxes that give you details of the game's implementation on a specific machine. These notes include ratings for

GRAPHICS

Respects of the game's graphics with the limitations of each machine taken into account. A good-looking spectrum game will therefore score higher than an average-looking Amiga one.

AUDIO

The music and sound effects are rated here. A high rating

is possible on even limited machines like the Spectrum and PC. If the computer's shortcomings are cleverly sidestepped.

IQ FACTOR

Yes, sometimes you have to use your brain. This rating evaluates the risk of mental injury - which some people actually enjoy. Note that ACE readers are generally reckoned to be more intelligent than other human beings, so the ratings may be lower than you expect.

FUN FACTOR

Basically a measure of mindless anticlockwise Games like *Arkward* and *Pygmy*. *Stark* require virtually zero brain power but we still remarkably addictive. Most brains score well here because they are designed for instant satisfaction. Games don't have to be either fun or intelligent - they can be both.

ACE RATING

This is not just plucked out of the air but calculated from the area under the PIC Curve. To get a really high rating a game will not only have to be very addictive but stand the test of time as well. Just because a game does not get over 900 does not mean we are not recommending it - the following is a general guide to what the ratings mean.

900+ A classic game recommended without reservation.

800-899 A superb game but perhaps lacking the long-term depth to last into the month and year cat egories.

700-799 Not highly recommended but probably has a couple of aspects to the gameplay that take the edge off it.

600-699 The fair view, where it tends to be very good, you like that sort of thing.

500-599 This still has good things going for it, but the game clearly has some noticeable problems.

400-499 Problems with gameplay and programming make this an inferior game.

300-399 Not only is the gameplay but by the design was probably flawed in the first place.

200-299 Things are getting really serious now.

100-199 (X) Games running on an Amiga.

Under 100 Nothing has ever achieved this appalling level of rating. If anyone ever does, it wouldn't even be worth having it for free.

VERSION BOXES

This covers version-specific information on graphics, audio, loading problems etc. If there's no box for your machine but a version is planned, it'll be covered as an update in a later issue.

THE TEAM

Laurence Scotland is ACE's ever busy Reviews Editor - Laurence has been playing games since he was a napper but some of them we probably ought not to mention. There was not a competition for the ACE Reviews Editor position from gamers all over the country, but Laurence popped them all off the post by showing that he could not only push a game to its limit, but he could push a pen too and tell you all about it.

Steve Cooke, one of the original editors at this award-winning magazine, is known to thousands through his many other previous adventures, including *Zepel's* *White Water*, *The Pyramid* and *Old Baldy*. When he's not borrowing money and popping off to the States Steve is often found playing *Shen's* *Lesson*, *Sail Larry* and other narrative computer

or games

Rik Haynes was Reviews Editor on Britain's biggest selling computer weekly and has been hooked on all things entertainment since spilling a Spice Invaders machine at the corner of a Southend-on-Sea pub back in '78. Rik's reviews are renowned for being hankling and often on-point. Eugene Lacey is one of Britain's most experienced games journalists.

We don't review anything until we are 100% certain that we've got it right. We've checked them out thoroughly - now you can too.

CONQUEROR

Way back in Issue 9 we reviewed the original Archimedes version of *Conqueror* from Superior and were suitably impressed - the game achieved a rating of 931. Now, a year and a half on, Rainbow Arts have delivered the Amiga and ST versions. We put our tin hats on and tell you how well the game has travelled.

There have been three impressive tank simulations released of late - M1 Tank Platoon from Microprose, Omega from Origin, and now *Conqueror* from Rainbow Arts. While it is pleasing to note that all of them are extremely good pieces of software, it is also interesting to note how different they are.

Omega is not so hot on the graphics front, but the ability to actually program and design your own automated tanks is the sort of thing that will appeal to the technically minded. M1 Tank Platoon on the other hand is the sort of full-blown simulator that Microprose is renowned for. It has the impressive graphics and attention to detail that are characteristic of all the simulations that this house has released to date.

Conqueror offers something completely different again. While it

is a technically accurate simulation, it will prove to be a lot more accessible to most players than either of the other two simulations. This is due, in part, to David Braben's graphics system, first seen in *Zarch*, which is used to generate the game's landscape and 3D objects. This uses a coloured patchwork of cubes to construct a portion of visible landscape onto which are mapped traditional filled vector graphics to represent trees, buildings, and tanks. The resulting three-dimensional view gives a very realistic feel as tanks disappear behind hills or judder across streams.

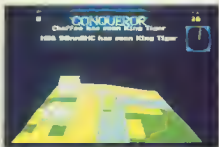
There are three basic games available at ten possible levels of difficulty all set in a Second World War scenario. These are Arcade, Attrition, and Strategy. The Arcade game allows you to get straight into play without too much thought. The objective is simply to hold out for as long as possible with a single tank against the computer-controlled opposition.

This game is useful for practising direct control of the tank, which can be tricky until you've had time to adjust. The default mode is control by keyboard. The rebel key settings are actually very good (that is to say you can reach everything), and this is probably the best method of control if you only have a single joystick. There is optional mouse control of the gun turret in this mode, which allows a second player to control the firing, while the first player drives the tank.

If you are playing on your own you can opt for either an automatic driver or gunner. This allows you to concentrate on one aspect while the other is taken care of by the computer. It is nice to see a thoughtful feature like this being implemented, but I quickly got frustrated at having to

modify my actions to suit what the computer was doing.

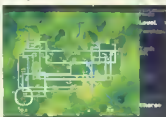
One extremely good feature of *Conqueror* is the number of control options available. You can



Trundling past some attractive buildings while reports come in from the rest of your force.



There probably won't be a high initial interest in this product, unless you are a hardened arm fan or tank fan or both. When you've got it up and running, however, you will soon be drawn in by the game's presentation and features. You will get most out of the game once you've had time to adjust to the controls and objectives. Your interest is likely to be kept high while you continue to make progress, waning only after you've been playing this for some time.



The map in the Strategy game clearly shows the circular area you must capture and hold.

RELEASE BOX

ATARI ST	£19.99	LATE FEB
AMIGA	£24.99	LATE FEB
PC	£24.99	TBA

No other versions planned



Patrolling a captured target area - the number in the top right-hand corner shows how many seconds you have left before you win the game

use almost any combination of mouse and joystick control that you care to think of. Probably the best option, but one requiring two joysticks, is to have a joystick in either port and to use one to control each of the tanks tracks. This works in a similar way to the old Battlezone arcade game (and indeed the controls in real tanks). In this mode the sideways movement of the sticks is used to control the turret, so you can do everything you need to do without having to take your hands off the sticks.

Once you have mastered basic tank

AMIGA

The game opens with a distinctive title screen and soundtrack and goes on to impress from there. Rainbow Arts have done a good job in getting the Amiga's comparatively unwieldy architecture to cope with a graphics system developed around a super fast RISC processor. Soundwise this version is certainly superior.

GRAPHICS 9 IO FACTOR 4
AUDIO 8 RUN FACTOR 1
925

ATARI ST

On the graphics front there is little to distinguish this version with that for the Amiga. The sound though is quite a bit thinner and unconvincing. Where the ST really scores is on speed. The Amiga can't make use of its graphics hardware for 3D graphics, and the ST therefore has a slight edge.

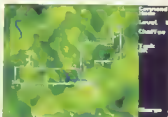
GRAPHICS 9 IO FACTOR 4
AUDIO 7 RUN FACTOR 1
920

select a new tank for manual control on this screen.

Once you are ready for a really meaty game you can select Strategy. This is similar to Attrition, but there are two possible objectives: completely eliminate the enemy, or hold a target area for a minute. The latter is easier said than done, since the target area is of quite a wide radius and it is not easy to keep individual enemy tanks from wandering into it.

The other difference between Attrition and Strategy is the ability to buy and sell components of your force to achieve exactly the distribution of light and heavy tanks that you require. There are also other options like spotter planes and map fire (which involves heavy shelling of enemy occupied areas) which add to the complexities and possibilities of the Strategy game.

There are some nice features in Conqueror that are peripheral to the main game, like the



The map shows landscape features and the Tel Aviv and Magenta dots denote opposing tanks

rotating 3D tank displays and stats that can be called up at any time during play. Then there is the ability to pitch German Tanks against Russian, or American tanks and play for either side - that should keep everybody happy.

Conqueror is certainly a very impressive piece of software. To hardened simulator fans I can recommend it wholeheartedly. If you haven't tried this sort of software before then the accessibility of Conqueror makes it an ideal place to start. If you're an out and out arcade fan though there really isn't much here to interest you.



The tank park shows the vehicles that you currently possess while those ranged along the front are movable if you have sufficient credit

manoeuvres it is time to go on and tackle the Attrition. In this game you have a basic selection of tanks comprising two light, two different medium, and one heavy. Your objective is simply to eliminate the opposition completely.

As well as having direct control over one of your tanks, you can direct the others by calling up the map display and moving the pointer to the required destination. It is also possible to



The Zorch inheritance quite obvious - note the pretty buildings that have been added



Knocked out in the arcade game - and the radar shows that the offenders have already fled

**ACE
RATED
925**

UP A PLANET

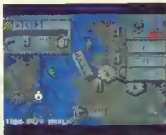
INFOGRADES import French board-gaming via the micro

MENTION board games to your average man in the street and he will probably conjure up images of Ludo, Snakes and Ladders, or Monopoly – classic games that almost everyone is familiar with. There are a number of dedicated individuals, however, to whom board-gaming means a whole lot more. They can be found at evenings and weekends hunched avidly over the lethal strategy game with a group of like-minded enthusiasts. American companies like TSR and Avalon Hill have been churning out games to satisfy such people for years.

For the average punter, however, such games can seem unnecessarily complicated. He doesn't want to have to plough through a thick tome of rules and then engage in a game which might last a whole day or longer. What he ideally wants is something original with easily grasped rules of play, in which most games will last for two to three hours and no more – perfect for a rainy evening!

There have been a few games to emerge in this country that have managed to fulfil this role quite nicely. Risk and Diplomacy being two of the more obvious names that come to mind. In France, one of the games that has achieved a popular status is *Full Metal Planète*, and it is on that boardgame that Infogrames' micro conversion is based.

The game concerns mining in the far future. Your objective is to land your mining Freighter on a planet, and collect as much ore as possible within the time allowed. Naturally enough, there are other parties also intent on grabbing their fair share of the ore, so you will have to



Iron Tutsa Muir's begins to deploy his forces in readiness for the conquest to come

compete with them for it. The competition is tough to point out at this juncture, is not only for the planet's resources but also for survival. It is permissible for players to not only destroy mining units belonging to opponents, but also to capture them.

The game is played on a landscape comprising mountains, level land, swamp, reef, and sea. This is divided into hexes which govern the positioning and movement of your mining units as well as the range of your attack/defence craft.

For the purpose of exploiting the planet's natural resources, and defending yourself, you have several types of craft: the Freighter itself, which is used for accumulating ore and craft, and ultimately transporting everything off the planet; Weather Hens for manufacturing new craft, transporting craft and ore, and predicting tides; Barges for transport across water; Clabs for transport across land; Attack Boats for defence on water, and Heaps (large tanks) and Tanks for defence on land. You can also use Pontoons to construct bridges.

The game takes place over twenty-five rounds, which are divided into eight phases. On the first turn you must land your Freighter, on the second you deploy as much of your initial equipment as you wish within the area immediately surrounding the Freighter. Next is the first movement phase in which you can expend five action points, which becomes ten in the next round and fifteen thereafter until the end of the game. In round twenty-one you have an early opportunity of taking off. This can sometimes



This is not exactly one of those disarming, seducing productions which squeezes as much as it can out of the Amiga, but then it doesn't need to. The 64k graphics and sound are just right for the nature of the game. Lots of very subtle, changing noises. The whole is a highly satisfying, most original game which is one to come across enough all the time that it seems to be crawling into your mailbox of life. Three disks packed with lavish graphics. Full marks for cutting down on unnecessary and annoying disk swaps. The sound FX are adequate if it is the unimpressive. Amiga is very useful even in the horizontally scrolling parts of the game – something that is not too easy to achieve on the ST.

GRAPHICS	7	IO FACTOR	8	AGE RATING	875
SOUND	7	FUN FACTOR	8		

be beneficial if you already have a good cargo and might be in danger during the last four rounds. If you continue to play then there are three more normal rounds, and on the twenty-fifth round you must leave the planet.

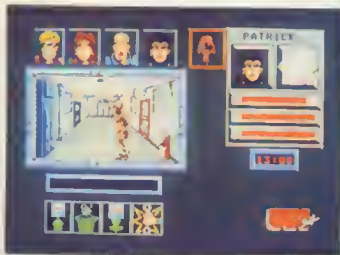
The game would be difficult enough if it simply involved collecting ore, and conflicts with other players, but you also have the lides to contend with. These change all the beginning of every round, either exposing or flooding land. This means that you have to carefully plan your moves in advance or you could end up stranding some of your craft.

For what is an apparently simple game, *Full Metal Planète* has in-depth gameplay which relies on nothing but skill (there is no element of luck in this game). It is easy to see why the board game has enjoyed such success over the years, and since this conversion allows for all the subtleties of play involved in its tabletop parent then you really can't go far wrong with it. As an added bonus, you can play on your own against up to three computer-controlled opponents, and even design your own logo using the built-in utility (called *Full Metal Palette* – so much for Gallic humour). This won't be to everybody's taste, but if you are looking for something a little different which you will still want to play after one game, then I thoroughly recommend Infogrames' latest product.

● Laurence Scarff



The map screen gives you a useful overview of the whole playing area



Pak. Patrick has an encounter of the bloody kind

ZOMBI

GEORGE Romero will principally be remembered for his rather graphic zombie horror movies. Despite their luridous basis they are quite entertaining and, occasionally, fairly gut wrenching if you are on the squeamish side, like me! Ubi Soft's game has evidently been quite heavily influenced by these films. Supplied with the software is a rather crudely drawn comic which relates events leading up to the start of the game.

The time is the 15th of April 1986 (could this be an indication of the length of time the project has been in development?). For some inexplicable reason the dead have become reanimated and are now walking the Earth to satisfy their craving for human flesh. Anyone who is bitten also becomes living dead. After a while only



The waiting helicopter ready to whisk your team off to safety

Get seriously

scarified by

UBI SOFT's horror

feature

a few pockets of human survivors remain - to make matters worse they have to compete with each other for the few available resources they need to ensure their continued existence.

Near to your groups location there is a helicopter which can be used to escape to a safer place such as a remote, uninhabited island. Unfortunately you don't have enough fuel for a prolonged journey. Your task is to find this fuel. There is, however, a rival group also looking for fuel so you will have to contend with them as well as the zombies.

The play screen is divided into several windows. The largest shows a three-dimensional view of the area just in front of your currently selected character. You can collect and manipulate any objects you see by clicking the cursor within this window. This is also used for combat with the zombies.

On the whole the zombies just pace back and forth ignoring you, but occasionally they will turn towards you and attack. At the beginning of the game you have nothing but your fists to protect you, but there are a number of weapons which can be collected to afford you more protection. If you managed to shoot a passing zombie in the head there is a satisfying gush of blood before the thing collapses to the floor in a heap.



Your initial impressions will be quite favourable - the program is attractively packed and the subject matter is enough to catch anyone's interest. Your initial expectations will be more than justified when you begin to play and sample some of the game's superb atmosphere. Of course the novelty will wear off after a while but your interest will rise again when you begin to make some real progress. Once you have solved the game you are unlikely to go back to it again, unless it's to cause some angst you still haven't explored.

RELEASE BOX

ATARI ST £24.95cd OUT NOW

AMIGA £24.95cd OUT NOW

AMIGA

Both this and the ST version look and play almost identically. The graphics are attractively mysterious and grey, yet enhanced in white. Like by Whicker's superb soundtrack. The whole thing is controlled with the mouse so you don't have to worry about endless hovering.

GRAPHICS 8 IQ FACTOR 7 AGE 12/13
AUDIO 8 FUN FACTOR 7 860

Movement is achieved by clicking on all the four arrowed edges of the main window. The up and down arrows are context sensitive, so while they move you up and down if you are on a stairway, they will move you forwards and backwards when you are in a corridor.

Initially you play with a team of four people. You can only move one of them at a time, so you must first select the relevant person. Naturally enough, moving around in a zombie infested area is quite a dangerous occupation, so it is quite possible that one or more of your party will meet with either death or zombification during the early stages of the game.

What is immediately appealing about this game is its atmosphere - you really do get a sense of menace especially when the Moody Dense Wiktor soundtrack gets going. Lone zombies pacing backwards and forwards are not exactly frightening, but the way they suddenly turn and attack you is a well-executed bit of work. It is also quite harrowing to find yourself suddenly facing a whole horde of hungry zombies. This happens quite a lot if you stray too far from the main scenes in the game.

There seems to be quite a lot to do and plenty of places to explore in Zombi. The way that you coordinate your characters takes a little getting used to, but this doesn't really detract from the game. On the whole this is one of the more creative and atmospheric animated adventure games I've come across recently and should provide some involved entertainment for general gamers as well as hardened adventure fans. Worth the wait!

• Laurence Sootford



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MICRO PROSE
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SPACE HARRIER II

GRANDSLAM tries for Mega micro performance



HEART TO HART

Mike Hart is the 21-year-old programmer of the ST and Amiga conversions of Space Harrier II employed at Tacue software development company. His onerous games include *Nyphax*, *Phazis* and *Memoria's Passing Shot*. Space Harrier II took five months to write using Linux's Devpac 2 assembler running on a ST Mega 4. Moving the game's floor correctly was the hardest thing to get right because all the 3D sprite moves are locked into the floor logic. Being a turn-based game, the program has a maze-like sprite bank and 10 complicated sprite handling routines. The hand-written path data is the only coding aspect Hart is disappointed with, as it isn't as accurate enough.

Surprisingly, Hart sees very few advantages in programming complex games – working indoors, the occasional free T-Shirt and the chance to put rude things in his source code are the only things that spring to mind. The list of things he dislikes about the industry is seemingly endless: mismanagement, hours, wages, workload and the fact that many young programmers get ripped off by software companies. "The coffee isn't that great either," sneers Hart. No wonder when I asked if he had any less for potential games coders, Hart answered, "base up bricklaying or chicken farming."

As for the future, Hart believes there will be a trend towards cartridge-based console games systems. "The games side of 16-bit computers will die a death because it's a shrinking market riddled with piracy and virus problems," in the meantime, Hart will be working on an original 16-bit computer game licensed from a "well-known" comic magazine.

WHEN Sega's Space Harrier first hit the arcades back in '85, its 68000-power, 4096+ colour burst and gut-wrenching hydro-cabinets, assured it cult status overnight. Inevitably a flood of micro conversions followed, from Spectrum to PC Engine. Indeed, Space Harrier has become something of a yardstick to judge your machine's audio-visual capabilities by. Enter the 16-bit Sega Megadrive console last year – what's the first game Sega decides to produce on this cyberdeck? Space Harrier II on the Megadrive is blurring over with massive end of level guardian supersprites which move at lightning speed around the screen without any hint of flicker. Now Grandslam has decided to convert Space Harrier II to all major home computer formats (even MSX). An impossible task or incredible achievement?

Gameplay wise, there's very little to Space Harrier II. You control a geezer who can fly all around the screen, simultaneously pumping out while-laser into a 3D forced perspective landscape. As you're doing this, the landscape speeds all you from the distance bringing with it obstacles and aliens of deadly presence – contact with them spells the loss of one of your lives. After you've dispatched a few aliens, you'll

Space Harrier II blasts onto ST.

...and the original Sega Megadrive version



come across a mega end of level alien – who'll visually impress you, while churning out deadly laser blasts at alarming speed and accuracy. If you manage to take out this substantial sprite, it's onto the next level – with added aliens, obstacles and even more frightening guardians.

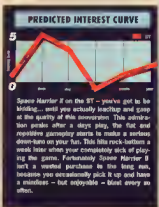
It's all pretty mindless and repetitive stuff – but it is immense fun. Any skills to be had from the game come from remembering the differing alien attack waves and obstacle movement patterns – certainly nothing to stretch the mind to any great degree. But this is a simple shoot'em-up after all.

Grandslam's Space Harrier II on the ST is so good a conversion, it makes the Megadrive redundant... until Sega comes up with the next generation of 16-bit blasters on its megadeck. The only thing Space Harrier II lacks is depth of gameplay – but that factor has never deterred any Space Harrier fan before.

By Rick Haines

SPACE HARRIER II SPECS 'n' STATS

Version	ST
Run-time Program Size	250K RESOK graphics stored on disk, 100K program, 100K gamemaps, 50K interface/music
Source Code Size	420K
No. of Levels	12 full levels, 12 guardian onslaught final confrontation with Dark Harrier plus 2 bonus levels
No. of Adventures	41
Max. no. of on-screen Sprites	51 of any size
Max. on-screen Sprite Size	117x112
No. of Sound Effects	6 + 2 triggered
No. of Soundtracks	15
Average Screen Update	12 frames a second
No. of on-screen Colours	27



Space Harrier II on the ST – you've got to be kidding... until you actually load up and gape at the quality of this conversion. The combination peaks after a days play, the flat and repetitive gameplay starts to make a serious down-turn on your fun. This hits rock-bottom a week later when you're completely sick of playing the game. Fortunately Space Harrier II isn't a wasted purchase in the long run, because you occasionally pick it up and have a missless – but enjoyable – blast every so often.

Amazingly the ST version runs just a little slower than the Megadrive parent – without the loss of any of the console's superb graphics. In fact, the Sega's graphics data was sucked straight out of its ROM and into the ST's source code. Audio is no great shakes, but then neither was the Megadrive's.

GRAPHICS	4	NO FACTOR	1	ADD. BONUS	
AUDIO	6	FUN FACTOR	7		819



As Emperor Napoleon it is time to survey the battlefield and deliver your first set of orders. Ahead of you can be seen your forces facing some of the enemy perched upon the Pratzen Heights.

AUSTERLITZ

PSS are currently riding on a warpaint glory wave following the release of the highly acclaimed Waterloo. Apart from the overriding historical accuracy it featured a quality of graphics unseen in any wargame, and the command system was more reminiscent of an adventure, with a competent parser breaking down whole paragraphs of typed commands.

Between Waterloo and Austerlitz the programmer also produced Armada and Borodino for Atari. Although graphically similar to Waterloo, this last was generally overlooked by wargamers who were all too happy with the new style software hitting them.

Austerlitz has also surfaced in much the same vein. The graphics are in the same style as its sisters, and although the commands are different the play system remains the same. Too much of a good thing is all very well, but too much failing to be different soon starts to wear thin.



Looking down the line at your battle ready troops

PSS/Microsoft run riot in Europe, but is history repeating itself?

Sit in Moldavia in the early nineteenth century, Austerlitz chronicles Napoleon's greatest battle, against the might of the Austro-Russian army. Naturally you're given the choice of which side to play.

Most of the standard options are apparent at the start up - except for a feature which allows you to change the start up orders for each side. So in theory you can start the game with the Russian forces surging forward to a rapidly surrendering enemy.

With you at the top of the command chain, all orders are issued to the divisional generals, who in turn pass the orders on to the respective platoons. It sounds complex and it is. Because of the historical edge it takes quite a time for orders to be carried out. After all you're a hundred and thirty years short of the walkie talkie. While sometimes frustrating when a division is being hammered, it does allow for some well timed cavalry charges.

If you've had no experience with this system before, the way commands are issued can prove frustrating. Orders like "Bessieres, take support from Bernadotte and form a defensive around Kobelnitz" will always confuse the unwary.

Despite all the glamorous extras Austerlitz still plays like any of the bland 'old style' wargames, which came as a surprise to me - it looked as though it could have been a case of all graphics, no gameplay.

Attention to detail is excellent. The manual contains a full background as to how this particular battle came around, what happened during

RELEASE BOX

ATARI ST	£29.95	IMMINENT
AMIGA	£29.95	IMMINENT
PC	£29.95	OUT NOW

PREDICTED INTEREST CURVE



The first real test is wading through the manual and getting to grips with the control system, which is no mean feat. Following that you need to sit down and really experiment with commands and getting used to the overall play system.

Once the wheel's used and Austerlitz provides some really absorbing challenges. The ability to change the start up orders allows the scenario to be varied for each game. Warring opens a whole new batch of different situations.

In the long term the lack of a design feature spurs Austerlitz to full extent of the mark, and it's this limitation that finishes Austerlitz: the play system is fully mastered.

PC

GRAPHICS 7 IQ FACTOR 8
KIDJO N/A FUN FACTOR 7 **732**

the battle, and who did what in the aftermath. Extremely useful in planning which route not to take in order to come out on top. It's attention to detail and ability to follow the battle to it's outcome that produces the atmosphere. You can fight the battle just the way Napoleon fought it, or opt for a completely different approach.

For all the good points there's one real factor that weighs heavily against Austerlitz: the lack of variety between it and its three predecessors. Once you've played one you've got a good idea of how the rest are going to look. A designer option would have helped immensely: it's a pity this facility has been overlooked.

Somehow I don't see this style of wargame having the lasting effect that is common with the popular SSG series. A recommended first time purchase, but if you have any of the others there just isn't any point.

● Mark Patterson

PREDICTED INTEREST CURVE



As an ex-depressoid rider and bike fiend, I've always wanted a bag of my own. Excitement was missing from my life. I just had the game, but it didn't take very long for it to plunge right down to almost despair once I'd hit the open road.

Travelling is the most joy of riding, and the riding in this game just isn't up to scratch—particularly not if you have a slow PC. If played from a 386, however, after a while the game begins to impart a certain rakishness about one's ego, so I moved from town to town. I began to take my charisma levels more seriously and indulge in more events.

I never got to Sturgis, though. Harley Davidson is a bit like the real thing: slow to look at, slow to move as a player file, but a bit expensive and prone to excessive vibration.

RELEASE BOX



PC	GRAPHICS 7	IQ FACTOR 4	ADDITIONAL 675
ST	AUDIO 2	FUN FACTOR 7	

BECOME the Ultimate Biker God. That, and nothing less, is your aim in Harley Davidson. Doubtless long-haired, greasy bearded, pot bellied, leather jacketed, social deviants are right now beating a farmac path way to their nearest software shop to grab a hold of the world's first official Hog Simulator.

Talking of hogs, this one is a bit of a pig. The program aims to blend arcade action (bike riding style) with strategy as you equip your bike, negotiate the rocky roads of Maine USA, encounter other brothers, and make your way to the great hog trough of Sturgis where your biker endurance will be rewarded. By biting the heads off chickens, no doubt.

You start in quasi RPG fashion by distributing points between various essential biker skills, ranging from engine maintenance to chansma (mainly for proking up chicks, eh what?). You then take to the open road and head for the next town.

The road sequences aren't hard to master. Unlike some bike sims, this one is pretty easy to conquer. As the landscape scrolls by you change up and down your six gears by depressing the control and up-arrow keys simultaneously (joystick is recommended, a mouse option is available but not so useful). Avoiding rocks, puddles, cars and other hazards you carry on to the next town, stopping on the way (if you fancy) to help a damsel in distress beside her broken down vehicle. You can then (if she fancies) give

HARLEY DAVIDSON

The open road; the throbbing

Harley Davidson between your

legs; the girls; the comradeship;

the leather; the heavy metal...

Can a game give you all this?

MINDSCAPE think it can...

her a lift to the next town for a reward (usually cash, but possibly an item of biker value).

Arriving at the next town, you refuel. This doesn't just have to mean refueling your bike—you can also top up your own pleasure circuits by rolling in the hay with the female fillor attendant. This doesn't seem to result in anything (certainly not a graphic display) other than a higher bill for fuel. Bikers, it seems, haven't heard of AIDS yet—or at least not in this game, they haven't.

After frolicking with the good time girl you can choose any of the other options available in town: shopping for parts (ranging from a helmet to a new engine), tuning your bike, and having a good time with the local brothers.

Fixing your bike simply involves choosing the part that needs attention (shown on a special status screen that gives you a health bar chart for each part) using your maintenance skill. Unless you're pretty nifty (and set your maintenance skill level high at the beginning) this isn't likely to have too much effect.

The local brothers, however, have more to offer. You can indulge in any one of five events,



Out on the open road. Which car for damage in distress on the verge: they may appreciate a ride and pay you.



The scenic run, disgusting, eh? But then you ARE disgusting, you fat, hairy, slut!

each of which offers you the chance to earn money, increase your standing amongst the bro's, and hopefully have a little fun in the process.

The events range from the finicky Slow-Ride Contest which is probably harder in the program than it would be on a Hog. I know that Harley's (like any big twin) are going to pack up at low revs, but this is ridiculous. Hint: pride look one on to the Drag race, which was a lot more fun and simply involves getting the revs right up before slipping in the clutch. The game lets you kick in first gear at practically any engine speed, leading to wheelies and a generally hairy race against the bro's.

Other events include Hill Climb (up hill in low gear dodging missiles from your 'friends'); Poker Run (grab cards from bystanders to get a winning hand, preferably without fattening them), and Weenie Run, in which a non-vegetarian lady snaffles frankfurters hanging on strings above the road as you shoof down the highway.

Finally, you can go partyin', which is at more interest for the boost it gives to your energy levels than it is for the Bob Seger tunes.

Mindscape have really tried to pack a lot into Harley Davidson. There's no shortage of wayside attractions at every stage of the journey to Sturgis, but, like most games that try to overwhelm you with variety, none of the elements really impress by themselves. The strategy elements (buying new engines, increasing your standing with the bro's) aren't well-developed enough to compensate for the lack of punch and the arcade sequences are too jerky and slow by modern standards. Like the real Harley Davidson, the game looks great, but once you've ridden it most people will start yearning for a highly tuned Japanese megamachine.

● Steve Cooks

small screen

The machine made use of traditional animation stored on a laser disc (which was still a fairly juvenile technology back in 1983). The animalled scans were shown to the player who

Again you must view each scene and make the appropriate joystick move at the right time in order to save your skin, but this time there is just that little bit more playability which actually makes a world of difference. You get quite a few minutes of animation on four discs for your money, but what a lot of money it is for what is essentially a very good audio-visual entertainment with a bit of interactivity thrown in.

Duch! A tardy joystick movement means Dexter takes the full force of Beef's laser.

At this price you would certainly have to have very high expectations of Spain. And it's not just that. If your own expectations are not disappointed either, it's usually for the wrong reasons. You're just not in a position to make the right choice. The claim is starting to wear thin, but you are actually beginning to make some progress at this stage, and the prospect of making a reasonable return is revealed to you. You can keep your interest here, but it shouldn't take you too long to get right through this one. Once you've done it, you'll maybe play through it once or twice more to show a friend, but then it'll move from likely to certain. It's a dusty old job for now!

SIDESHOW

LIGHT guns seem to be coming back into vogue these days. If you are a veteran gamer you will probably recall those ancient consoles with five or six built-in games. On the whole they were variations on Pong, but some machines also had simple target games which involved obliterating a large white blip that bounced around the screen. For the latter purpose a cheap plastic light gun was provided along with the paddles that controlled the other games.

When the early consoles began to lose out to their more sophisticated counterparts then the good old light gun went into decline too. Recently, however, there has been a resurgence of newer, more sophisticated light guns. Companies like Cheetah Marketing and Amstrad have been busy producing light guns for the Spectrum and CPC (although this is little more than a ploy to keep sales of 8-bit machines as healthy as possible).

The trend has been slow to catch on in the 16-bit market – although you can readily obtain trackballs, graphic pads, light pens and so forth for the more sophisticated machines, light guns are harder to come by. American company, Actionware have now rectified this deficiency (at least as far as the Amiga is concerned), by producing a phaser light gun along with several games that support it. The latest of these is *Sideshow*, which, according to the manual, they developed as a contrast to the violent themes in their earlier phaser compatible games.

This game, as you might have gathered from the title, is based around the sort of fair ground events where you take pot shots at things in an attempt to win a cuddly bunny that, probably costs less to buy than the money you paid to win it in the first place (phew!)

There are eight events you can play. *Balloons* has you popping them to find a hidden pattern. *Balls* involves shooting at green balls while avoiding red ones. *Potpourri* is the classic shooting gallery where you can pop off ducks, planes, and so on. *Strength* requires you to make weights shoot up posts to hit bells. *Kisses* gives you the opportunity to chuck sharp objects at a rotating clown (actually you're supposed to miss him). *Clock Shoppe* gives you a chance to get your own back on all those

Experience all the fun
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ACTIONWARE



We recommend that you don't try this at home, since a smashed clock face is likely to provoke a little revenge shooting!

annoying cuckoos by shooting them as they appear from their clocks. *Mounted Owl* is another classic in which you shoot at various spooks and nasties before they disappear, and last, but by no means least, there is the *Duck Tank* in which quick shooting will give you the satisfaction of seeing poor Willy get wet.

Although there is a facility within the program to ensure that your light gun is properly calibrated, I still found it very difficult to shoot with any accuracy, even at a fairly close range. This could, of course, be an indication of my abysmal shooting skills, but I suspect that most people will actually experience similar difficulties. Playing with the mouse is a lot easier (and, indeed, the only option open to you if you do not possess the phaser).

You are not free to play any event as and when you wish. You begin with a limited number of tokens and before you can play some of the more expensive events you must win a few tokens on the cheaper and easier ones. Unfortunately it is no good just selecting an event you are good at and playing it until you build up a bundle of tokens, because a booth will be closed if you win it three times.

You also have to watch your hunger level – if this gets too low you'll have to pay a visit to the Food Stand to top up, which will also use up some of your hard earned tokens.

On the whole, *Sideshow* is a highly entertaining game which will probably appeal to mmm, dad, and kid sister as well as seasoned games players. There is a lot of disk swapping, which can be quite frustrating, but this can just about be forgiven considering the variety of gameplay you are treated to.

AMIGA

Reliability no computer has so far in production is concerned. All of the graphics are very colourful and well designed (you get a real sense of depth in the Duck Tank, for instance). Sound is suitably cartoonish, even down to the crowd noises in the booth selection screen. My only real gripe is the continuous disk swapping which is extremely annoying – owners of a second disk drive are laughing.

GRAPHICS 8 IQ FACTOR 3
AUDIO 8 FUN FACTOR 7 **850**

RELEASE BOX

AMIGA *Electronic Zoo* CUP NO. 1

PREDICTED INTEREST CURVE



Let's face it. *Carved Clocks* are not the sort of thing that are going to get your average games player tremendously excited from the word go. *Monkey* said that, most people will enjoy this game once they start playing it properly. Your enthusiasm will probably die a little once you've had a few goes, but this is the sort of game you are likely to go back to intermittently.

SET PHASERS TO STUN, MEN!



The Actionware Phaser light gun for the Amiga is not available in the UK at the time of writing, but Electronic Zoo have plans to rectify that situation in the near future. They hope to be marketing the gun at about the same time as they import Actionware's next game, *Creature*. They may also be bringing us some of the earlier Actionware releases. The projected price for the gun is £24.99.

There are also a few bonus features thrown in, like random events, Easter Eggs with a secret purpose, and the ability to design your own face for Willy in the Duck Tank. If you are looking for something a little different that will appeal to a wide age range then *Sideshow* is definitely worth a look.

● Lawrence Scotland



No! The phaser is not for taking pot shots at the milling crowd! This is Actionware's non-violent game...

CEREBRAL SOFTWARE



As the disk loaded, I felt drawn into different reality, an alternative world where I assumed the identity of another*



CONFLICT

The Middle East Political Simulation
IBM PC • COMING SOON • Amiga • Atari ST

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Amiga • Atari ST

Experience the reality of commanding an American WWII combat submarine in the South Pacific. Master the controls of your vessel, then embark on a series of missions - from "search and destroy" sorties to detailed escort duties modelled on real WWII campaigns. With eleven different submarines, fourteen separate missions to attempt, at a range of difficulty levels as well as practice patrols that take place during the day or at night, HUNTER KILLER has a host of features that outclass any other submarine simulation.

GRIMBLOOD

Amiga • Atari ST

Place yourself deep within the walls of Castle Grimblood, here lurks a murderer, who is preying on those who live by and keep the rituals. You as the young Earl, Matmus, must uncover the terrible secret in order that he can unlock the chains of timeless obedience to the rituals of the castle and gain his freedom. If you fail you are certain to fall victim yourself to the stalking assassins knife... A gothic whodunnit, written by Mike Singleton, featuring digitised sound and graphics and promising a different game every load!

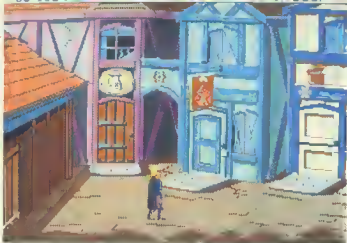
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*Screenshots may be taken from a different version.

Acetic Sierra sidage: the shopkeepers are all in the pub getting drunk.

SIERRA take the system that created Leisure Suit Larry and add RPG concepts – surely this has to be a winning formula?



HERO'S QUEST

IT had to happen Sierra, not content with being America's number one graphic animated adventure house, has finally cottoned on and introduced RPG elements into its games. Imagine Leisure Suit Larry, Kings Quest, Police Quest – all brilliant games – and then add the excitement of creating your own character and building him or her up while you play. Surely this has to be a recipe for unmitigated gamesplaying bliss?

Unfortunately, where Heroes is concerned, the ingredients haven't quite done justice to the recipe. Here goes. TAKE ONE SIERRA ANIMATED ADVENTURE SYSTEM, COMPLETE WITH SUPERLATIVE GRAPHICS AND SIMPLE TEXT ENTRY. No problem there, even if we do have to ignore the usual slow speed of Sierra games when running on anything less than a Cray Mk 10 or an equally unaffordable 386 VGA PC. Heroes, however, is noticeably faster than the earlier products and the system that gave us Leisure Suit Larry can't go far wrong.

Next TAKE A GRIPPING SCENARIO. Oops, no gripping scenarios available. The dramatic inspiration that gave us the child slave in Kings Quest II, the desperate Foscilla in KQIV, or the absurd Larry Laffer in the Leisure Suit games has obviously run out here. Instead we get a chap who simply wants to be a hero in Spielburg (flattery will get you nowhere, Sierra). Heroes in



The combat screen: clumsy larrys and slash manoeuvres don't get the adrenalin going as much as they should.

PC	Graphics 9	IQ Factor 9	Age Rating 825
	Audio 7	Fun Factor 8	

RELEASE BOX
ATARI ST
AMIGA
IBM PC



When you get this one out of the box you're practically exploding. Tons of characters, unimpeachably (3.5" and 3.5") and the promise of your favorite game system AND the death of character creation.

A little while later the excitement dies down as you realize you can't really create anything interesting either: there are only four types, no sex discrimination, and only standard attributes (strength etc). There are a few little touch up back-packing and weapon skills but none as surprises.

Once you get into the game, you soon get caught by the lower bound of superb graphics, musical accompaniment, and the promise of lots of puzzles. The combat system, however, proves a big disappointment, and it finally you settle down to a typical Sierra adventure with only a few bits of added interest. And, of course, down you're pulled in, you're hooked with it.

fantasy games are ten a penny. What we want is character interest, chaps, and there ain't none here.

Next ADD GENEROUS DOSE OF RPG ADDED INTEREST. Disaster. The sack of RPG Added Interest is totally empty. Instead of giving us a meaty team of adventurers as in Birds Tale or Ultima, we have a single player character. He cannot recruit anyone and interact with other characters any more than any of the other normal characters in Sierra games.

Finally TAKE UP-ROARING COMBAT SYSTEM AND KICK ASS. Are you kidding? Sierra games have class, not ass. Jefferson the up-roaring comical system and instead pop in a single screen with graphical opponents clumsily stabbing at each other. Invoke a few routine dodge and stab manoeuvres, slow it all down nicely, display graphs of strength and stamina. Forget all about strategy (you can't really have any anyway, since there's only one player character) and forget about action (it's too slow). Finally, make it all rather easy to escape from if things get tough (they do).

All that is, in essence, the story of Heroes. But it's a story with a happier ending than you might have expected. Underneath the RPG pretensions you have another Sierra animated adventure cartoon with superlative graphics, a weaker story line than other recent Sierra releases, loads of puzzles, and a healthy modicum of enjoyment. Forget, therefore, about the RPG innovations as they're not really up to the expectations they raise. The only nice addition is the ability to play a thief, magic user, or warrior which adds some variety and a few minor spells to the scenario. Otherwise, this is standard, but very beautiful fare for Sierra addicts, who have quite rightly discovered that you don't need seething arcade action or mega-sophisticated parsers to make a good game...for those who can afford it.

● Steve Cooke

TAKE THE LAW OWN IT



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AMSTRAD · COMMODORE · SPECTRUM

ENTERPRISE (PC)

A golden olde from Melbourne House (remember them?) which costs you as a merchant space pilot. Your aim is to earn enough money to retire to Paradise Planet. This is done by collecting minerals and selling them to the inhabitants of the innumerable planets in the known universe. As well as building up a fortune you must also insure your ship and its contents, buy food and fuel, and make the occasional repairs.



Once you have mastered the hyperphysics of jumps and landing on planets you can begin to converse with the aliens. At this point the game begins to bear an uncanny resemblance to a very ancient program called Eliza. This was a clever piece of programming that picked up on common parts of speech and analysed them to the extent that it was able to give you apparently intelligent replies.

What you have here is essentially a poor man's Eliza. It has a few nice touches but I wouldn't be prepared to lay bets on its long term playability.

ACE RATING: 500

WORLD DARTS (PC)

Given half a chance, bored programmers will spend their time trying to simulate absolutely anything and everything on their favourite machine. The latest victim is the classic game of Darts. In this implementation a hand wielding a dart in a rather unsteady fashion drifts with increasing rapidity across the screen. By using the cursor keys you can change its direction but you can never hold it still. Once it is positioned roughly where you want it a quick flick of the space bar is all that it takes to send the dart flying home.



The control method takes a little getting used to, but there is a fun game to be had here once you get the hang of it.

ACE RATING: 675

SPEEDBOAT ASSASSINS (Amiga)

At first sight this looks and feels a lot like the old arcade game Road Blasters, only water has been substituted for tarmac. Your task is to il-

ALL FOR A FIVER!

Laurence Scottford looks at

six titles in the new 16-Blitz range published at £4.99 by

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evate four important harbours that have been taken over by enemy forces. There are three stages involved in achieving this.

First you are dropped off by helicopter and must guide your unarmed speedboat through a narrow channel of floating mines to gain entrance to the harbour. It is easy to do this without danger by going slowly, but unless you take it all speed you will lose a substantial bonus.

Next comes the main meaty part of the game which involves you speeding across the harbour taking out mines and various craft. Your weapons can be upgraded by docking with the helicopter (not an easy manoeuvre when you've got the enemy throwing hell at you!) You must destroy four red communications towers to neutralise the harbour.

Once you succeed in this it's on to the final stage - blowing up the mine equivalent of an alien mother ship. Hit the battleship twenty to thirty times and you are off to the next level. This last stage however, is so difficult that there is more luck than skill involved.

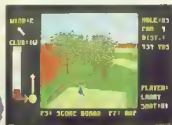
On the whole a reasonable challenge, but it won't be long before your eyes are glazing over.

ACE RATING: 650

CALIFORNIA PRO GOLF (PC)

There have been several very good golf games available for a variety of computers over recent years. Loadboard and Jack Nicklaus for instance and it seems to be becoming a popular past time for golf addicts who can't stand the rain. If you're a bit short of cash however, then this is a viable alternative. All of the usual features are here: both three and two-dimensional views of the hole, wind conditions, club selectors and the ability to control shot power, hooks, and slices.

On the whole (or should that be hole?) this is a pretty reasonable golf simulation for the price.



Worth a look if you fancy a round without leaving the comfort of the nineteenth

ACE RATING: 700

KELLY X (ATARI ST)

Way back in time when the Spectrum was still one of the best micros to be had, Imagine produced an odd little monochrome game with wireframe graphics in which you played a space trashman pushing 3D objects into a black hole. Kelly X also has you destroying pieces of floating space junk, and apart from the fact that the wireframe graphics have been replaced with solid vector graphics the two games are



tadously similar (in fact the ancient Imagine effort was twice as playable). Five minutes will be enough to have you reaching for the reset button.

ACE RATING: 390

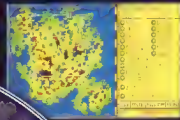
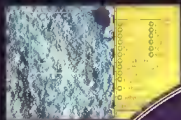
ROAD WARS (ATARI ST)

I really can't understand the thinking behind the re-release of this game. It went down like a lead balloon when it was first released as a full price game, and even at this low price it just doesn't cut the mustard. The game has you speeding down a curved road shooting various rogue items, provided you can manage the unwieldy controls that is. A complete waste of a fiver!

ACE RATING: 300

THE NEW ICE AGE DAWNS





MASTER OF STRATEGY



THE STRATEGY GAME

MIDWINTER

OF THE DECADE ARRIVES

As a new Ice Age dawns in Rainbird's gigantic new classic, strategy gaming also enters a new era. For Midwinter is a genuinely original concept that launches revolutionary techniques onto the home computer screen.

The scenario is convincingly realistic as a new Ice Age grips the world. Together with a small group of pioneers you have colonized the Midwinter Isle, a 160,000 square mile land mass now under threat from invaders intent on seizing your sanctuary.

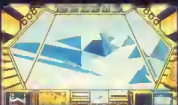
Compelling action and strategy take place across a spectacular 3D fractal generated landscape with its stunning geographical



accuracy. You control 32 personalities, each with different qualities, skills and complex personal relationships. Enemy movements can be tracked, and battle plans made, using the incredibly detailed on-screen map.

In your bid to defend the life-supporting heat mines, you can ski, hang-glide, travel by snow buggy or cable car, snipe and sabotage the enemy. There is no easy way to win, but the game's unique depth and absorbing complexity will keep you trying until you do.

The deep Midwinter is upon us. Be prepared for a long and exciting battle against its elements.



PRO TENNIS TOUR

SPORT simulations for popular micros have come and gone in recent years although very few have left more than a fleeting impression before a player moves on to other games. The problem with sports simulations is that something as fluid and indeterminate as the performance of the human body is impossible to simulate with any accuracy. The joystick waggling track and field type games come closest because they at least provide some sort of physical test. As far as other sports simulations are concerned, what you actually end up with is an arcade game that makes use of the rules of a sport, but otherwise bears little resemblance to the experience of actually participating in the game in question.

This has not stopped many programmers from making many brave attempts to do just that. One of the earliest attempts to capture the essence of tennis in a computer game was Paxon's Match Point. This employed a high 3D perspective and was quite fun to play, but didn't really allow for all the subtleties of the game. Then there is Imageworks' Passing Shot which is a conversion of the arcade machine. But while this is a good game it employs an overhead view — again, not exactly helpful for developing subtle shots.

Now Ubi Soft have a had a crack at the tennis simulation and come out looking good. Pro Tennis Tour has been selling for some time now in France as Great Courts and going down a storm — I'll be very surprised if the same thing doesn't happen here.

Again you are presented with a three-dimensional perspective view of the court which works well apart from the apparently huge size of the ball when it is at the opposite end of the court. The joystick (or keyboard) controls your movement across the court. Shots are played by pressing the fire button to swing and then releasing it to actually hit the ball. Unfortunately you can't move the player while you are swinging, so you have to make sure that you are positioned correctly before you swing the racket. This can lead to some rather tricky shots if you have to slide right over to the other side of the court first.



Not so hot on clay! The score shows that this particular referee needs a lot more practice.



Where's that ball going? Not where it should be, that's for sure!

The direction of your shot is determined by your distance from and relative position to a cursor which marks the destination of the ball. This takes a little getting used to, but the system works quite well once you have become accustomed to it. Additionally the crosshair can be switched off by selecting either Advanced or Professional, as opposed to Easy mode.

Serving is also accomplished with the use of a cursor, only this time you control its position. Again it takes a while to get used to this and you can expect to lose a few points through double faults while you are growing into it.

The main part of the game is tournament play which gives you the chance to sample several different surfaces: Grass at Wimbledon, Clay at the French Open, Cement at the Australian Open, and Cement either covered or uncovered at the U.S. Open. In tournament play you begin ranked 64th and must play successive computer controlled opponents. They play extremely well, so you are going to have to really develop a good technique if you are to stand any chance at all of winning a match.

Fortunately there are comprehensive practice options which allow you to improve your service, or return balls delivered by a machine using one of six different programs. You can also select to play against another person using the second joystick port. This does mean that one of you will have to play at the far end of the court, but this is alternated so both players get a chance to play the easy end. As with the tournament the practice options can be played on all three surfaces.

What really makes this particular tennis simulation stand out is attention to detail. Witness the line judges getting tennis neck, or the machine bleeping if the ball skims the net. The sprites are not that attractive, but they are realistically animated. This is easily the best tennis simulation to date and should keep Wimbledon fans happy during the winter months until they can get the real thing on their screens again. Highly recommended.

● Laurence Scotland

**ACE
RATED
900**

Anyone for tennis?

UBI SOFT/

BLUE BYTE are!

AMIGA

Although the graphics are not quite as pretty as they might have been, they are enough to convey the atmosphere of the real thing. The sound effects also help tremendously in the atmospheric department, even the thump of the ball hitting the ground changes depending on which type of surface you are playing on.

GRAPHICS 4 IQ FACTOR 3
AUDIO 8 FUN FACTOR 9

900

PC

The sprites are a little crude even on EGA, but again the animation can't be faulted. As per usual with PC games, the sound leaves a lot to be desired, but Blue Byte have done quite a good job at squeezing as much out of the PC's feeble buzzer as they can. One useful feature is a meter that allows you to indicate which type of machine you are playing the game on. An adjustment for speed can then be made. This prevents you from having to return a westerly service (in a 305).

GRAPHICS 5 IQ FACTOR 3
AUDIO 5 FUN FACTOR 8

850

RELEASE BOX

AVATAR

AMIGA

PC

PC

PC

PC

PREDICTED INTEREST CURVE



Oh, you've seen tennis simulations before, and at first sight this one doesn't look like anything special. After a while, however, you are beginning to get used to the controls and starting to really enjoy yourself. You will also be impressed by the attention to detail, and features like the practice options. Although your excitement will begin to wane after you've put in a few hours of play, this will be more than balanced by your improving technique. You will almost certainly still be playing this one long after tennis games have been consigned to the dustbin of software pits.

MONEY FOR OLD ROPE

THE GAME AIN'T NEW, BUT THE CONVERSION IS GLEAMING!

C64



Bomber

Activision; £14.99c;
£19.99dk; PC version
reviewed in Issue 27; ACE rat-
ing 925

Vector Grafix superb flight sim, Bomber, emerged on the PC last year to great acclaim. Not only did it include fourteen planes but also boasted incredible solid 3D vector graphics. There was also a variety of features to keep non-specialists happy (such as the out-of-cockpit views) and a mission designer. Although everybody seemed very excited about the program all the time there was a dark thought at the back of a lot of people's minds. This is fine on a 386 PC, but what will the 8-bit versions look and play like?

Now that the C64 version has emerged it is time to either lay off or confirm those fears. When the thing finally loads you are presented with the usual aircraft selection screen, and at this point things look good. It is only when you get beyond this point that some of the C64's deficiencies begin to show.

The most obvious thing is that many of the options available on the PC version are not available here. Well, that's to be expected because of the memory restric-

tions. When you actually begin to play, the reduced screen area and slow update speed are also partially noticeable. However, it would not be fair to decry the program too much. It is still a remarkable achievement, but perhaps a little over ambitious which may give existing C64 flight sims the edge.

ACE RATING: 775

Bollistix

Psychapse; £12.99dk,
£9.99cs; Amiga version
reviewed in Issue 20; ACE Rat-
ing 686



Psychapse computer variation on Crossfire is back again, only this time on the C64. The idea behind the game is to repeatedly fire balls at a spherical puck, and knock it into your opponent's goal. You can either play against another person, or on your own, fighting against gravity. All of the elements of the other versions are here, the only difference being the slightly poorer quality of the graphics. The game is fast and fun and provides plenty of short term fun. Not a lot of staying power though.

ACE RATING: 600

Chase HQ

Ocean; £9.99cs; Amiga and Spectrum versions reviewed in Issue 29; ACE Ratings 840 and 868 respectively.

Take a very simple idea for a driving game, add some fast high-quality graphics and lots of sound, stick the whole lot in an arcade cabinet and you've got something approaching Chase HQ. The con-op has done very nicely for itself. I think you very much, so it was no surprise at all that Ocean made quick use of their Taito license.

The first two versions of the resulting game were pretty good. OK so the graphics on the Spectrum (and even the Amiga come to that) don't come anywhere near



those of the arcade machine, but the conversions do retain its playability. The C64 version could easily have been the same, but unfortunately the janky and slow graphics and shoddy sound don't help matters much. The game is enjoyable enough but it doesn't really compare to the first two versions.

ACE Rating: 700

SPECTRUM

Operation Thunderbolt

Ocean; £9.99cs; Amstrad and Amiga versions reviewed Issue 29; ACE Rating 815 and 927 respectively

Taito's blood 'n' guts con-op Operation Wolf went down a storm with arcade addicts, who were all able to pop along to their local outfit after a hard days grind and practice killing the boss with an Uzi - very refreshing. Hardly surprising then that being able to do it with a friend in Operation Thunderbolt was even better. Even less surprising is Ocean's release of this game after the successful conversion of Wolf.

The best thing to say about the Spectrum conversion is that it is very competent and quite a lot of fun. In the end though I found that, as ever, the monochrome graphics began to get in the way of my full enjoyment of the game. When things get frantic it becomes almost impossible to pick individual figures out against the background, it's a shame that it is this totally unavoidable factor which spoils an otherwise superb conversion.

ACE Rating: 725



TRADE SECRETS



Trade Secrets is an exciting new concept in games: hints and tips. In addition to your excellent Tricks'n'Tactics sent in to us, ACE will pick the most popular game released every month, and ask its programmer to reveal all the game's inner secrets. Every game taking play will be covered, from complete game maps to hidden cheat modes and bonus levels — told by the person with ultimate knowledge of the game... its creator!



IF YOU KEEP ME IN AROUND LIKE



Keep onto your turbo's till you catch up with the criminal's car. Try to hit the car at the side rather than its back. You get 10 times the score and hit points if you turbo and hit the car's side. It normally takes around 20 hit points to take the car out.



CHEAT AT CHASE

What better way to begin Trade Secrets, than with the top selling computer game of Christmas '89? Ocean's Chase HQ racing-sim con-op conversion was reviewed in ACE 29, where it achieved a 868-rating on the Spectrum. Rick Haynes discovered all Chase HQ's inner secrets by grilling its programmer, John O'Brien.



IF YOU KEEP ME IN AROUND LIKE



Take the wrong route to get more points. When chasing a crim's car, activate the Continues feature as soon as possible, because they keep on moving while the continue counter clicks round.

You can cause more damage by jumping on the criminal's car.

Switch to low gear on the hard turn. The best time to switch to high gear is when you reach 100. The inside lane normally has the faster cars. Power down to low gear before activating gear turbo to achieve a fastest speed in the least amount of time.

SPECTRUM AND CPC CHEAT

Go into the redefine keys option and press SHOCKED [ENTER]. You should now get a menu selection screen allowing you to view the logo animation, restart a level, move onto the next level, go straight to the end screen, gain an extra credit or enter the hi-score table.



STAGE 5



FITTING THE PIECES TOGETHER...

Taking 6 months to develop, the Spectrum version of Chase HQ was written on a ST Mega 2 using Ocean's custom-designed suite of development software, which includes assembler and graphics editor. Although the game's sprite and background graphics were designed on the ST, the loading screen was drawn directly on the Spectrum. A large percentage of O'Brien's programming time was spent writing Chase's complex 'jigsaw' graphics language used extensively in the game, for instance when relaying graphic objects on the roadscene. O'Brien said,

"getting the speed while relaying the graphics in perspective was the hardest thing to achieve - it's shifting a hell of a lot!" The sprites were designed by William Harbison on the ST using Ocean's m-house graphics editor. Once the monochrome Spectrum sprite outlines were created, versions for the CPC could be coloured in. O'Brien's favourite sprite is the helicopter pilot portrait in the control panel because "it's very stylish and the colours work well." Jonathan Dunn translated four soundtracks from the coin-op and many Japanese console games - these are the types of games O'Brien prefers. When asked why gamers should buy Chase HQ, O'Brien unashamedly answered, "it could be my last Spectrum game!" O'Brien finished our interview with a tip for any potential game coders or designers wanting to hit the big time: "when you send stuff to software companies, never send anything average - people always remember your worst work rather than your best".

Despite this flaw, the screen update rate is a staggering average of 13 frames a second - could Chase HQ be the fastest Spectrum race-game on the market? Inate Speccie programmers can write to ACE at our nominal address. O'Brien is most pleased with the flying logos on the game's title screen,

C64 CHEAT

Similar to the ST and Amiga cheat, simultaneously hold down the fire button and type GROWLER. During play you can now reset the time by pressing the T key.

CHASE HQ SPECS 'n' STATS

Version: Spectrum

Run-time Program Size: 320K multi-load

Source Code Size: 640K

Program Breakdown: 20% Code, 79% Visuals, 1% Audio

No. of Levels: 5 stages

No. of Adversaries: 1 criminal + 3 other cars on each level

Max. no. of on-screen Sprites: 50

Average no. of on-screen Sprites: 20

Max. on-screen Sprite Size: 'Bloody Big' - the tunnel is the biggest sprite

No. of Sound Effects: 15 + 5 samples

No. of Soundtracks: 4

Max. Soundtrack Length: 90 seconds

Average Screen Update: 13 frames a second

ST AND AMIGA CHEAT

You'll need a friend for this one! Simultaneously hold down the fire button and left mouse button and type GROWLER. When you start the game, just press the T key to reinitialise the timer.



Each car has a different size, or max. speed depending on which lane its in. Car get more and more intelligent as the game progresses - they all cut and turn and some even try to deliberately get in your way. Restricted overtaking to the straight because you get pulled towards the opposite lane on a turn.

Don't worry too much about hitting obstacles - although they incur time penalties none of them just cannot be avoided.

ALL THESE SPECTACULAR HITS IN A SPECIAL PACK! **IT'S GOTTA BE**



...this is brilliant... which is the best comic licence ever - you'd be batty to miss it. **CRASH SMASH.**

THEO DE COMICS INC HERE, ALL RIGHTS RESERVED.



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"What more could anyone ask for in a shoot-em-up. Operation Wolf, simply is The Business." **CRASH SMASH.**

TANO CORP 1988.



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HYPERGUIDE

LETTER

Dear ACE,

What the hell's all this rubbish about **hypermedia** CD-I, and a **games revolution** I've never even SEEN a CD-I machine. In fact, people tell me they don't even **exist**! Is this true? Are you just trying to **press my buttons** for what?

Yours sincerely,

Joe Public.

LINKED

You just followed a link to this frame. To find out more, check the **Margen** frame

You just pressed a button - well, you would have done if this article was implemented on a computer **hypermedia** system. And you got here

BUTTON

FRAMES

This is another frame. All the boxes in this article are frames. Each frame is given a name, which is usually the same as the **button** that activated it.

PRESS MY BUTTONS

Colloquial phrase meaning 'attempt to induce a sudden state of uncontrolled emotion, e.g. anger, misery'. The term **button** is also used to refer to an element in a hypermedia system.



The joy of Cosmic Game is that you don't know where the buttons are. Pondering them (and seeing the results of pressing them) adds a delightful dimension of discovery to the game.

TURN THE PAGE

HYPERMEDIA

Hypermedia is a trendy catchphrase that really took off following the development of so-called hypertext systems. These are simply databases which present information to the reader in a format that allows him/her to browse through the information in the database in an unstructured, intuitive fashion. They work as follows:

Information in each frame is, however, **linked** to relevant passages of information in other frames. So, for example, if you were constructing a hypertext version of an encyclopaedia, the frame containing the reference for Xenon it might mention the Bitmap Brothers details of whom might be contained in a separate frame. The user could then click his mouse pointer on the words Bitmap Brothers and the system would automatically display the new frame with their details.

In this example, the words Bitmap Brothers would be termed a **button** - clicking on buttons enables you to move from one frame to another along predefined links and the process can be continued indefinitely. For example, the new Bitmap Brothers frame might contain a reference to biplanes, clicking on which would take you into a whole new area of reference: graphics programming. This movement from frame to frame, exploring the information in the database is called browsing. Furthermore, each frame need not be limited in size (except by storage capacity, of course), so clicking on a reference to Othello in the frame about Shakespeare might call up a frame containing the text of the entire play. For this reason, CD-ROM, with its vast memory storage, has rapidly become associated with hypertext systems.

In a hypertext system, frames contain only text. However, people soon realised that they could hold other things as well. Given the right hardware, frames could contain sound samples (click on Seal II Soul, hear Jazze B), graphics, or even other software systems (click on Xenon II, play the game). When these other types of data are incorporated, they're moved from hypertext to hypermedia.

The most important development in games-playing history is now well and truly underway. It all started with something called 'hypertext'. Here's the full story...

How to use this guide:
Just start with the letter, and follow the links in any order you like.

To help make things easier, we've broken the links between the frames on this spread and the previous page. If you want to follow your link from a button on page 57, just look for a frame on this spread with the same name as the button.

The Guinness Book of Records is a typical hypermedia package, offering sound, graphics, and simple animation. See page 24 for more details.



EXIST

Yes, this is unfortunately true, at least as far as we were able to ascertain at the time of going to press. None of the major CD-I systems are yet available for public consumption and the development systems in use by software houses are constantly being upgraded.

However, the software systems that will drive the new machines are already being developed using existing technology. This is the importance of games like Cosmic Osmo or

Psychokiller.

These games may look crude, but they really do represent the beginnings of a games revolution, because the concepts they are developing will later drive hardware capable of making your gaming dreams come true. Yes, it will be worth the wait.

SONY

This company have recently been buying up Hollywood film companies left, right, and centre. Expect to see interactive versions of famous movies in the near future. Soon you'll be able to Come With The Wind, instead of just going with it.

Sony were also collaborators with Philips on the CD-ROM and CD-I standards.

PHILIPS

We covered the Philips CD-I machine in ACE issue 24. Scheduled for release during the next couple of years, it's promised at under \$1000.

CD-I

Make no mistake: CD-I is totally hyper-confusing! In fact, here in the UK if anyone claims to know anything about it, you can be pretty sure they don't. Here are the facts...

The laser disk technology that has given us compact disks for music can also be used for computer data. Unfortunately, the WAY in which it is used has evolved in many different directions.

CD-ROM

This simply means any CD that holds data in a read-only form, as defined by the Philips/Sony Yellow Book (see the Jargon frame).

Microsoft, the company dominant in the PC market because of their operating system MS-DOS, are keen to maintain their exalted position in the future by further developing the CD standard. Amongst other things, they recently recruited Greg Riker (who previously headed up Electronic Arts' CD-I development division), so let's hope games considerations aren't entirely absent from their plans.

Microsoft have recently announced three levels of CD-ROM development: CD-ROM, which is really just the basic storage facility; CD-ROM XA, which allows audio and digital signals to be retrieved simultaneously; and CD-ROM XA plus full motion video. The latter uses a special chip that, by compressing/decompressing the data can speed up the transfer rate.

CD-I

Most people know that it stands for Compact Disk Interactive. All this means is that the hardware and operating system of the unit which accepts the CD is capable of taking data off the disk and allowing you to interact with it. In order to do this, however, you have

to be able to drag the data off at a considerable speed. It would be no use, for example, if the user wanted to click his mouse button on Mick Jagger's animated lips and hear the vocals of Limping Jack Flash if the system was so busy animating the lips that it couldn't get the sound data out at the same time.

This problem of data flow is THE big technical angle-bear of ALL CD development. In order to animate a full frame of video, lay over a CD-quality soundtrack, AND add in all sorts of clever computer wizardry (sprites, for example, or icons to control the system) you need to shift enormous quantities of data at very high speeds. Finding ways of solving this problem has led to a number of different standards being evolved, and this in turn is responsible for the confusion in the market and the fact that there STILL isn't a CD-I machine to be seen on the shelves in Deans.

However, the best known standard is that currently being developed by Philips and Sony. So if someone talks about CD-I, they may be simply using the term loosely, or they may specifically be referring to the Philips/Sony system.

DV-I

In the search for rapid data retrieval, RCA developed a chip set that, when bolted onto a PC equipped with a CD drive, solved the problem. DV-I can not only produce full frame animation, but it can also handle the sound as well, and – very important for us gamers – it has a superb graphics processor that produces really high-quality computer graphics. You can thus mix pixels with video with ease and great effect, which is essential for many current game styles.

DV-I was recently purchased by Intel. Since Intel, Microsoft, and IBM are all closely linked in the PC market it has been suggested

that Microsoft's CD-ROM XA with full motion video is in fact the Microsoft operating system with DV-I bolted on. There has, however, been no confirmation of this.

We thus have three main 'CD-I' systems. The Philips standard, which is still under development, has yet to offer full-motion video (but will soon), and is now expected in the shops at the end of this year. But then, it was expected in the shops two years ago. The Philips approach is currently the only one that explicitly promises a unit for use in the home (and therefore for games as well as reference and education). When we will see it is another matter. Furthermore, the graphics processor on the Philips system is not exactly state-of-the-art, so if you're expecting Amiga-quality sprites to dance across your video back ground, forget it. Think more in terms of C64/MSX quality there.

Then we have Microsoft's CD-ROM development program. This is currently targeted at the business arena and PC users in particular (though there's no reason why it shouldn't be made available for other machines).

Finally, we have DV-I, which is by far the superior system and which may turn out to be the engine behind CD-ROM XA (the third stage of Microsoft's development, that offers full frame video animation).

It would be lovely if all this confusion sort of itself out in the next twelve months and left us with the best possible system on the shelves at the lowest possible price. But it won't. Remember the battle between Betamax and VHS on video recorders? Betamax was the better standard, but VHS won. As for the time schedule, think five years, and don't expect to see your 1990 Christmas stocking bulging with CD-I goodies.



Perkins (left) used to design games like The Boggit and Robin of Sherwood using adventure generators. Now he's turned his hand to hypergames; he reckons they're the great yet unsolved challenge to creating his yet encountered. Find out more about hypergames on page 21.

NOW GO TO PAGE 11!

JARGON

ACT

In CRL's EGADS system (see page 61), a sequence of frames/actions.

BUTTON

An element within a frame which, when activated by clicking on it with mouse, for example, calls up another frame.

CD

Compact Disk: a 12cm laser disk as used in standard CD audio systems.

CD-COMMON

A disk format standard that can be read by both Macintosh and IBM machines.

CD-G

Compact Disk and Graphics: an early CD-i standard developed by Warners and offering CD performance with added graphics facilities.

CD-I

Generic term for interactive compact disk technology. Also a standard developed by Philips/Sony. Offering up to 660 megabytes of storage, eight hours of stereo sound, 32,768 colours for static graphics, 256 for programmed animation.

CD-IV

Infrequent term, referring to CD-i with full motion video capabilities.

CD-ROM

As a generic term: any CD offering read-only storage. More specifically a standard developed by Microsoft and leading to advanced CD-i potential.

CD-V

Compact disk video: an analog/digital system from Philips that can play CD-audio and accompany it with a full-motion video signal. Unlikely to have much significance for games.

DVI

Digital video interactive: a chip set developed by RCA and now the property of Intel. Offers full motion video and sound together with graphics manipulation features.

FRAME

In video terms: a single screen image, updated 30 times a second (in NTSC format) and 25 times a second in PAL/SECAM formats. In hypermedia terms: a single file within a hypersystem that can be displayed on screen and which conventionally contains text/graphics data; however can also be used to contain sound or program code.

GREEN BOOK

The Philips/Sony book of standards for CD-i technology.

HYPERCARD

A simple hypermedia system developed for the Apple Mac, popular with yuppies, and now bundled free with the machine.

INTERACTIVE VIDEO

A system that enables a video program and a computer program to run simultaneously under the control of the user.



The Philips CD-i machine covered in ACE 24.

IVT

Interactive Video Tape: a hardware system (different versions exist) that turns a VCR into an interactive system by splitting the tape into

different tracks and switching between them under computer control. Covered in ACE issue 26.

LINK

The connection between two frames, activated when a button is pressed.

LV-ROM

Laser Video Read Only Memory: an analog/digital system used for the BBC's Domesday Project.

RED BOOK

The Philips/Sony book of standards for CD-Audio technology.

REFLECTIVE OPTICAL VIDEO

Disk technology whereby a laser inscribes shallow pits on a glass master disk. Copies are then pressed in plastic with metal stampers moulded from the glass master. The copies are then covered with reflective aluminium and sandwiched between layers of transparent plastic. Used for most CD applications.

SHOT

Alternative term for a hypermedia frame, used by CRL in their EGADS system (see page 61).

TRON

The Real Time Operating Nucleus: Japan's challenge to CD-i, yet to be seen, evaluated, or—possibly—even produced.

YELLOW BOOK

The Philips/Sony book of standards for CD-ROM technology.

YELLOW GREEN STANDARD

A mixed media CD-ROM format, so-called because of its mixture of techniques from the Yellow Book and the Green Book.

UNRIVALLED



MASTERS OF



COMPILATIONS

Follow That Clue!

Let's be honest, now CRL is not one of the country's biggest software houses. Right now, however, it's putting together a hypergame system which proves that even the little guys can hyper it up.

THE GAME

Remember Dennis Wheatley? The bloke who sent horrible hairy spiders prancing across the living room in search of innocent female flesh in *The Devil Rides Out*? Although best known for his Duke de Richelieu black magic stories, Wheatley (grandfather of Domini's Dominic Wheatley, just in case you didn't know) was also a prolific author in other areas and one particular oddity he churned out was a sort of DIY murder kit called *Herewith the Guns*.

Produced in collaboration with a Mi Links, HTC came in a neat little folder that contained a number of documents, some photographs, some press cuttings, and various exhibits in little bags. The story centres round terrorists in London just before the outbreak of the Second World War. As Assistant Commissioner of the Met, you have received a tip-off regarding the badies, and when one of them gets killed you have to first identify and locate the gang and then establish a link between each member before finally nailing the guilty party.

When Clement Chambers of CRL spotted this little antique, the first thing that sprang into his mind was that it would make an ideal hypermedia project. It has all the right characteristics (see the article on page 28), lots of visual and written data, all linked together and all creating logical pathways for the would-be sleuth to follow with his magnifying glass or, in a hypergame, with his mouse.

The first thing to do, however, was to come up with a software system. As Clem says, hypermedia is quite unlike a normal games programming project. With the latter, you get a lot of programmers and

CRL have come up with Britain's first games-dedicated hypergame generator.

graphic artists sweating away for months on slate-of-the-art graphics and sound routines... which are finally shown off to best advantage by a lousy game design. With a hypergame, however, the actual software system is comparatively easy to program: it's the data that's the problem. HTC offered all the data on a plate. All that was needed was the engine to drive it.

THE SYSTEM

Enter 18-year old John Casey, who in six months produced Britain's first games-dedicated hypergame gen-

Hardy Stuff

The next EG&S game comes from a Laurel and Hardy license and much of the material is drawn from an original Laurel and Hardy black-and-white movie entitled *Way Out West*. Images for manipulation by EG&S are first grabbed from a video of the movie, then linked together using the system. In addition, designer Michael Hodges is including a new front end, icon control, and animation. This is a development screen with dummy data; the label in the middle of the picture is there to identify the screen at a later stage when the correct graphics are linked in. "One of the joys of hypermedia," says Michael, "is that you can perfect the game design first and then simply in the visual and sound data at the very last minute."



This shows a typical HTC frame during development with EG&S. The rectangles indicate the current location at buttons which, when clicked as by the player, will lead to new frames. Naturally these rectangles are not displayed during play! You see dollar as many buttons as you want on each frame.



One of the digitized frames in *Way Out West*



One of the frames in HTC: looks a close look at this man a doodle, check his head-writing, and then scrollside this evidence with information in other frames to discover a vital clue. One of the delights of hypermedia is the ability to mix all sorts of different cues for the user: visual, audio, and textual



Exhibit C
Doodle

erator Called EGAS, it allows a non-technical game designer to assemble data in the form of digitised images, text documents, Deluxe Paint files, sound samples and what-have-you and then link them together into an interactive network of exploration and atmospheric experience.

EGAS actually stands for Expert Graphic Adventure System, which might lead you to think that it was something along the lines of Incentive's Graphic Adventure Creator, but in fact nothing could be further from the truth. There is no 'parser' or other adventure software-type feature, instead you have a true hypermedia engine, very similar in many respects to Apple's Hypercard system and quite capable of turning out a game like Manhole or Cosmic Osmo — but in colour rather than simply in black and white (Osmo was monochrome only). It's also much easier to use from the game designer's point of view because it's hand-made for producing games rather than the jack-of-all-trades nature of Hypercard.

EGAS uses typical hypermedia terminology (see page 28-30). The more normal frame is called a

'shot' by CRL, but the buttons and links are there as usual. The designer is able, using EGAS' control panel, to build up a series of links between screens (see panel on this page) and, by determining the sequences and connectors, he/she can construct an entire hypergame universe.

Herewith the Clues comprises 16 exhibits, 11 photographs, 25 frames of character information, and fifty frames of relevant documents. This isn't an error-

CRL aren't bogging their system all to themselves, they've given a copy of EGAS to Ferguson McNeill, the man who used to use adventure generator. The Quill to bring you games like The Boggit and Robin of Sherlock (see page 29). This connection between hypergame generation and the old adventure utilities may not be entirely coincidental: is the hypergame the 1990's replacement for traditional adventuring?

amount by Hypergame standards and there isn't any animation involved the next EGAS game will feature animation — see panel). Furthermore, in keeping with the time period, all digitised images are in slightly out-of-focus black-and-white. On the other hand, there's a lot of scope here for brain-stretching and you're unlikely to finish the game in an afternoon, or

possibly even in a month. You'll find yourself backtracking through various screens and following different routes time and time again as you correlate all the evidence and build up your case.

HTC should be available in February or March on the Actual Screenshots label for £19.95 for the ST. Other versions should follow later. Watch out for the ACE review of this first British hypergame in the very near future. Meanwhile, we've only got one gripe: why not make EGAS available on the open market in the same way as the old adventure utilities. The Quill and GAC, were that would really challenge the status-quo!

meanwhile, we've only got one gripe: why not make EGAS available on the open market in the same way as the old adventure utilities. The Quill and GAC, were that would really challenge the status-quo!

The System

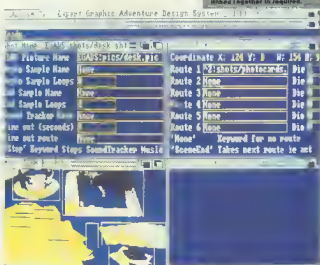
The EGAS control panel, as seen by the games designer. The first task is to choose a graphic frame, which can be any IFF file (i.e. a digitised or Deluxe Paint file). Once loaded into the system and labelled, it is displayed on the bottom left of the screen and becomes the current shot or frame.

The designer then uses the mouse to position 'buttons' on the frame. For example, if you wanted the program to display another frame showing a photograph, (together with the sound of rattling pages, when the player clicked on the pile of photos) in the current frame, you would proceed as follows:
1 Click with mouse on the current frame in the position where you wish the button to be in this case on the pile of photographs;
2 Locate the two files with the graphics and sound data and link them into the system, stating EGAS what they are called and where they are;
3 Instruct EGAS to establish a link between the current frame and the two new files, to be activated when the button is pressed;

4 Press on (a) defining the next button... Other features include a 'time-out' facility, so that if during play the user moves from one frame to another but then takes no action for a specified (variable) amount of time, EGAS will redisplay the previous frame.

You can also, very usefully in games, have randomised buttons which, when pressed, can take the user to any one of a number of frames. The probability of moving to any particular frame can be defined in EGAS by the designer.

EGAS is very memory efficient, a frame takes up about 2k. That, however, does not include the data. As a rough guide, a digitised monochrome picture as seen in Herewith the Clues takes up about 20k. EGAS stores sound samples up to 20K in length, which is around 12 seconds of good quality sound if sampled at 10kHz. The sample rate can be varied, of course, so you could have good quality speech samples at around 45 seconds duration, and they can always be linked together in real time.





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ACE AT ATEI

R K AYN S PLAY HE I C O KC * LEA

The Amusement Trades Exhibition International (ATEI) con-op show at London's Olympia exhibition centre is the UK's premier arcade trade event, showcasing a myriad of new con-ops, slot-machines and pinball decks, as well as the more traditional leisure gear like go-carts, inflatable castles and shooting galleries.

Visitors to the show consisted of middle-aged sales-suits, parbes of hassled-looking Japanese, and the obligatory teenage gamers out for unlimited credit play on the latest con-op consoles. Quite a few peeps from the computer software biz turned up as well – perhaps they were looking to snap up a licence or trying to get some inspiration from the games on display? They were unlikely to achieve either. The most refreshing aspect of the show's attendees was the large proportion of teenage girls playing con-ops and enjoying the show – hopefully this finally dismisses the general preconception that arcade games are strictly a male-only leisure pursuit.

LEADING LIGHTS

Konami, one of Japan's major con-op manufacturers, used ATEI to launch three new arcade games in the UK: *Ahens*, *Gradius II* and *Teenage Mutant Ninja Turtles*. Based around the superlative James Cameron movie *Ahens* 2, the first of these games features digitised stills from the film and colourfully gruesome alien creature sprites, as you clean up an alien-infested off-world colony with the help of hyp-



Target with open, get the go-kart...



ATEI at Olympia, no one didn't have a good time!

gurs, grenade launchers and flame throwers. The game is a simultaneous two-player multi-stage shoot'em-up which flicks between horizontally and vertically-scrolling backdrops and static, head-on sections. Its sprites and backdrops are very reminiscent of the film, but the action is a little repetitive despite the approach of mini-stage section-play. Still well worth a look though, especially if you're a fan of the film. By the way, William Gibson – cyberpunk guru and author of the *Neuromancer* sci-fi novel, is currently working on a script for the *Ahens* 3 movie.

Gradius II is the latest in the classic Namco series of shoot'em-ups, featuring all the power ups we've come to know and love – laser, missile and double, to name but a few. It will of course do a storm in the arcades, but its gameplay and visual styles, rooted back in '85, are starting to look dated now when compared to the likes of *X-Multiply* and *R Type*.

Teenage Mutant Ninja Turtles (see ACE 29 for more on *Mutant* manual) was the best Konami game on stand. It's full of character and charm, as you move from your Teenage Turtle sewer-dwelling to rid the city of villainous scum and save ace reporter April O'Neil from the evil clutches of the Shredder – in a comic simultaneous four-player martial arts beat'em-up. After all, when you live in a sewer and are trained in the art of Ninjitsu by a "radical rat mentor", you don't want to be turned into Turtle soup or wax!

The veteran US con-op maker, Atari, produced two new titles to an appreciative audience. *Klax* is a 3D-perspective variation on the incredible *Tetris*, calling itself a tetra-tile game. Its graphics are bright and colourful, but the now constant barrage of *Tetris*-inspired con-ops may soon become tiresome – if it hasn't already. Far more exciting was *Bad*



Make me an offer I can't refuse



lands, the long and eagerly awaited successor to Supersprint. Set fifty years after a nuclear holocaust, *Badlands* is a *Mad Max* road-warrior track race-sim, featuring car customising options and eight tracks including city, desert and oil refinery backdrops.

Alan's Namco subsidiary also had an interesting coin-op on show. *Fourtrax* is a sit-down buggy-bike race simulator incorporating a thrilling new twist – simultaneous head-to-head competitive play with up to eight people. Many coin-op manufacturers are looking into multi-player arcade games at the moment and Namco believes its newly developed hardware used in *Fourtrax* gives the company the jump over its competitors.

BEST OF THE REST

Among the other entertaining coin-op games on stand were Tatsumi's *Round Up 5 Super Delta Force* racing game featuring live-stage Chase HQ-style racing in a three-screen sit-down cabinet, Sega's *Op-Wolf*-style *Line of Fire* and Sega's *Shinobike* *Shadow Dancer*. Irem's excellent *R-Type* II also made an appearance.

Final Fight from Capcom is a Double Dragon style save-the-girlie kick'em-to-death 'em-up set in 1990's Metro City a town not too dissimilar to New York with slum, uptown and bay areas full of familiar-looking skyscrapers and scumbag inhabitants. Nothing original to be found here, but fun nevertheless.

Already out on computer formats and the Sega Megadrive, *Rambo* II finally made his coin-op debut and in the cube stakes, Tad Corp came out tops with its Toki scrollie arcade adventure featuring a lovable monkey-esque hero complete with American Football helmet! Could this possibly be the New Zealand Story of 1990?

Tecmo obviously has '90 in mind with its World Cup football game, strangely titled *World Cup '89*. The game looks a bit like *Audio-genic's* *Emlyn Hughes Soccer* with a side-on 3D view and plays like *Microprose Soccer Unltd*. Unfortunately the player control is slow and jerky. When will Amco's brilliant *Kick-Off* be upgraded to coin-op format?

The most off beat coin-op at the show was Mitchell's *Pang*. You control a little chap (who looks a bit like the sprite out of Activision's fantastic *Park Patrol* computer game) at the bottom of a static screen trying to avoid a giant red sphere which bounces merrily around the screen. If you shoot the ball, it splinters into two smaller spheres, thus doubling the chance of you getting hit. This continues until the



Not all those people wearing Delta II helmets: These they're playing the updated Line Laser trackball shoot'n race game



"This must be the golf game of the century," says the ad

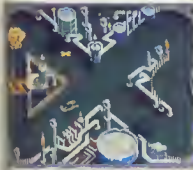
sphere's get too small and they're destroyed with another hit – then it's onto another backdrop, only with more speedier blobs and some on-screen obstacles. Weird city or what?

AND NOW FOR SOMETHING COMPLETELY DIFFERENT

As the amusement industry diversifies away from coin-op/slot machine entertainment, it has started to look back to its roots for inspiration. First there was the renaissance in pinball machines, even culminating in a *Robocop* pinballer – are we talking streetcred? Now another old fave from the distant past, has been resurrected, redesigned and relished for the 90's fickle leisure tastes. The go-cart.

Remember the good old days – the daytrip down to Southend-on-Sea's go-cart track at Peter Pan's amusement park, the stench of burning rotten rubber, the obligatory broken brakes, the older drivers who deliberately slammed into your cart when their parents

weren't looking? Well don't get too nostalgic, 'cause all that's changed now as go-carts get cyber and become the latest "in-thing" for corporate leisure weekends. These days, go-carting consists of indoor Le Mans-type organised races, yuppies (or whatever they're called this year), and four-stroke air-cooled 158cc carts capable of speeds in excess of 40mph! I wonder when the updated turbo-nutter coconut shire is due for release.



Alan's successor in the superlative Super Sprint

1

The Untouchables from Ocean

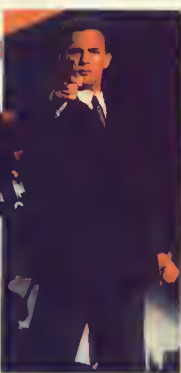
Relive the knife existence of Eliot Ness in his struggle against the rebirth of mobster Capone

The ultimate sex exciting action sequences put you in control of Eliot Ness's elite squad of crime-busters

Alleyway shootouts, The Border Raid, The Railway Station confrontation and Warehouse bust culminating in the thrilling rooftop duel as you relive the knife edge existence of Ness in his struggle against the rebirth of Capone!

The Untouchables

	PRICE	CODE
Commodore 64	Cass £ 9 99	BF801CC
Commodore 128	Disk £14 99	BF802CD
Spectrum 48K	Cass £ 9 99	BF803SC
Spectrum +3	Disk £14 99	BF804SD
Amstrad CPC	Cass £ 9 99	BF805AC
Amstrad CPC	Disk £14 99	BF806AD
Atan ST	Disk £19 99	BF807ST
Amiga	Disk £24 99	BF808AM



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3

Michael Jackson Moonwalker from U S Gold

After conquering the world of pop music, Michael Jackson channelled his energy and talent into making his first film. Now U S Gold present the home computer version of that film, endorsed by the Superstar himself! Feel the rhythm in Club 30, transform into a futuristic silver robot and ultimately beat the drug peddling MR BKG in the unique world of MOONWALKER a game like no other.

You will be unable to tear your self away from the screen even when it's way past midnight!
Mark Higham - ST Format



Moonwalker

	PRICE	CODE
Spectrum 48K	Cass £ 9 95	BF816SC
Spectrum + 3	Disk £14 95	BF817SD
Commodore 64	Cass £ 9 95	BF818CC
Commodore 128	Disk £14 95	BF819CD
Amstrad CPC	Cass £ 9 95	BF820AC
Amstrad CPC	Disk £14 95	BF821AD
Atan ST	Disk £19 95	BF822ST
Amiga	Disk £19 95	BF823AM



1 2



Laser Squad from Bladesoft

Laser Squad combines strategic skill with the use of grenades and a variety of automatic weapons to defeat your foe. You can take the part of hunter or hunted, play with a friend and take turns at opposing roles. One player option plays against artificial intelligence so highly developed it bites!

"Laser Squad is a terrific game that is superbly playable and can definitely be recommended as one for the library of any gamer/player." *Andy Smith, Amiga Format*



Laser Squad

		PRICE	CODE
Spectrum 48	Cass	£ 9.95	BF8099
Amstrad CPC	Cass	£ 9.95	BF810AC
Amstrad CPC	Disk	£14.95	BF811AD
Commodore 64	Cass	£ 9.95	BF812CC
Commodore 128	Disk	£14.95	BF813CD
Atan ST	Disk	£19.95	BF814ST
Amiga	Disk	£19.95	BF815AM

GET ONE FREE!

4

Operation Thunderbolt from Ocean

Follow up to last year's No 1 hit "Operation Wolf". The game brings you enhanced shoot'em up action for one or two players. Thunderbolt not only reproduces the horizontally scrolling gameplay of Wolf, but adds 3D action to the scenario as you test your nerve against swooping jets, helicopters, tanks and many more awesome adversaries! Use the laser sight or the bulletproof vest, but watch out for those air-to-ground missiles.

"Brilliant is the only way to describe Thunderbolt" - not a game for the faint-hearted!

Trenton Webb - Amstrad Action

Operation Thunderbolt

		PRICE	CODE
Spectrum 48K	Cass	£ 9.95	BF824SC
Spectrum +3	Disk	£14.95	BF825SD
Amstrad CPC	Cass	£ 9.95	BF826AC
Amstrad CPC	Disk	£14.95	BF827AD
Commodore 64	Cass	£9.95	BF828CC
Commodore	Disk	£14.95	BF829CD
Atan ST	Disk	£19.95	BF830ST
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ACE 02/90

The of Pratchett

OK, so what's our excuse for putting Terry Pratchett in the magazine, eh? He's brilliantly funny (well, his books are) and – oh yes – he uses computers to produce his literary gems. Definitely advanced computer entertainment...



Terry Pratchett, Discmaster

Ask anyone in the street about Terry Pratchett and half the people will say "who?" and the rest will say "yeah, brilliant, I've read all his books".¹

Terry Pratchett grabbed his first slice of cult status with the initial Discworld book, *The Colour Of Magic*, an introduction to the flat planet called the Disc and its wild magical lifestyle and characters. The colour of magic, as it turns out, is a sort of pinky-green, but the common thread through all the books has always been, not the magic, but a wry sense of humour: jokes that set you up pages before they hit you, coupled with a complete mastery of the 'footnote gag'.

Up to date there have been eight Discworld novels, shortly to be joined by a ninth, *Moving Pictures* but nowadays less time is free to actually write as Terry finds himself in demand as a speaker at sci-fi and fantasy conventions, doing signing tours, and answering the phone to people doing their GCSE projects on him.

You get quite a lot of mail now, something like four times as much as you did last year. What do you get besides GCSE students?

Down the bottom of the pile to get answered are the people that think the way to write to a humorous author you like is to be rude, in what they think is a funny kind of way. Like "Well, I'm writing to you because I've got nothing better to do with my time" because I've got nothing better to do with my time! Okay, bottom of the pile, August 1992 we'll answer that one. The ones you like are the ones who say "I've never written to an author before", that sort of thing. You get some touching ones, and very nice ones. But the thing is when I'm not messing around with the computer trying to get it to do what I want, I can quite often spend a morning "doing the office work", which means I'm not writing.

What did you want to be when you were little?

An astronomer. I thought it was all looking through telescopes, you see, but in fact what it is, is sitting in a hut in Congleton doing mathematics. My daughter wants to be a Marine Biologist, and she thinks that's all swimming with dolphins. I said to her, it's all sitting in a hut in Congleton doing mathematics. Funny thing is, I met someone who is a Marine Biologist and he told me that's exactly what it consists of!

You recently collaborated with comicbook writer Neil Gaiman on *Good Omens*. You both use PC's so do you communicate by bulletin boards?

¹Obviously the number of yes votes goes up if you stand outside a book and fantasy bookshop, but the public remains sharply divided into two schools.

"When we were doing the early drafts we thought we'd be incredibly modern and Jerry Pournelle about it and squirt the stuff down the line to each other. Neil lives in West Sussex, and so we both live in a rural telephone area. We both use Procomm, basically the same modem, and we both had IBMs. We ended up doing it at 300 baud because the mistake rate at 1200 was so high. By the time we kept nipping each other up say, "are you sure you're on BNT, because all I'm getting is a row of little faces." We might as well have yodelled to each other in Morse code and it would have been faster. Anyway the post is more or less reliable, you might as well just bung a disk in the post."

Do you tinker with your computer when you're supposed to be working on it?

I do an awful lot of tinkering, but largely because I'm neurotic about backing up. I've got three machines, large IBM's upstairs. I back up to all three simply because I get so nervous about losing stuff. I lost Mort the day after I sent it to the publisher, because I foolishly formatted the hard disk. So they had a final version but I didn't. And when six months work nearly goes up the swanny it makes you a little nervous. Tinkering has it's place. You can't sit there and pound out words every waking moment, so bashing your head in frustration against a computer casing is the next best thing to a hobby.

Where did the original idea for Discworld come from?

I damn. Haven't the loggiest idea. No, I know where bits of it come from, that's straightforward Indo-European mythology. The rest of it just evolved. Now days, I actually work on ideas for Discworld. I say I'd like to write a Discworld book with Death as the central character, then think about how I'd go about it. With the early ones, though, the stuff just turned up. I think that the Discworld in *Guards! Guards!* is a much more interesting place than it was in *Colour Of Magic*. I can do more with it now. It's very gently progressed.



"I don't want a smiley face telling me to wait. I want the thing to go bang!"

from the kind of medieval civilisation which all high fantasy takes place in, to something which is rapidly approaching the Renaissance. This is okay, I think, because you can get more gags out of that.

You use an Atari Portfolio don't you, for taking notes and even writing on the move? Do you find it reliable enough?

'I've got to have been one of the first people to have got one. There are undoubtedly certain bugs in it. When I first got it, I took it to the World SF Convention in America, and it was great. I had about a thousand words and a spreadsheet on it and then it hung up. Resetting wouldn't work. I tried everything, I even replaced the cells with the ones I got with it, which I now assume were dead, but couldn't get it back. Then when I got home I tried fresh batteries and it came back. I was understandably curious about why I didn't get a Low Battery warning like it says in the manual. So I rung up the Portfolio Helpline. And they say 'An yes, it's the Duracells, see? There's this problem. The slope is so sharp the Portfolio has trouble with it'. So essentially what they were telling me was that if I use Duracells, which are the logical choice, I might not get a warning. But you supply long-life cells with it! I protested, in the end I thought, what the hell I made a point after that for not keeping the batteries in for longer than a month. So what's happened now is that, well I got one of the very first ones, and you know what happens to people who get the first ones of any machine?

They basically bug-test the machine for the manufacturer?

Right. It would appear that what Atari were telling everyone about the batteries isn't so. It's some kind of bug you get when certain internal fees get to a specific size. I have to say that once we got through that bugged stage it's been fine, I did have problems at American customs, but with them looking at the thing because they wanted a GO on it, not trying to take it apart to see if it had a load of bloody Semtex in it I've been stung mightily for a 64K RAMCard from a shop that seemed to put VAT on twice. But put it this way, if I dropped it and it broke I'd buy another one the same day, it's that useful. Anything bigger than the Portfolio is an item of luggage.

What's it like to type on?

'I can type very fast on it. I did 5000 words in 10 days, which isn't my average, but it's bloody good for spending a lot of time in aeroplanes and at conventions and stuff like that. I was still keeping up a healthy output.'

If you could write anything other than Discworld stuff, what would you do?

In the early summer Good Omens, by myself and Neil Gaiman, will be coming out, and that's a departure from Discworld. It is (lansley I suppose, I don't know) There is no way I could be a serious novelist. Which is a shame, because I have a rather good forensic horror idea, but I know I can't do it. I did think I should find some guy who can do it and come to some arrangement.

What's your favourite type of music?

Jim Steinman or Jim Steinman or failing that Jim Steinman, quite often, I've got a lot of Jim Steinman and Meatloaf. Kitaro, heard of him? I got Velvetreen by Transvision Vamp, which was actually a bit of mistake. The title track was superb, but the rest of the album is pretty so-so. But it's okay.



'Starglider: I've played that till it hurts...'

Discology
The Colour Of Magic
The Light Fantastic
Equal Rites
Mort
Wyrd Sisters
Sourcery
Pyramids
Guards! Guards!

Moving Pictures (out November 90)

Non-Disc Books

Well there was The Carpet People (written about 20 years ago for kids), then Strata and Dark Side Of The Sun (a pair of early sci-fi books). The Unabridged Cat (a best selling cat book, like most cat books), The Truckers Trilogy (comprising of Truckers (out now), Diggers (out soon) and a third as yet untitled conking volume (nearly finished) and of course Good Omens (with Neil Gaiman out in May).

Do you like computer games?

'I've yet to find a game on the IBM which comes close to a moderately good game on the Amstrad CPC128 we've got. Things like the original Balman, I used to sit and play that for hours. Starglider on the PC isn't too bad, I suppose, I've played that till it hurts. Oh, and there's a rather nice little game called Sopwith: you just chug around trying to avoid enemy aircraft and bomb them installations. The graphics are dreadful, but the gameplay is extremely good. I've seen a lot of Amiga and Atari games where the graphics are good, but I'm not certain how good the gameplay is. I just want to sit there and shoot aliens basically. Oh, Manic Miner, on the Amstrad was another one where I got totally addicted. I got through without the extra lives POKE, though!

What would you like computers to do that they don't currently?

They're not bright enough to anticipate what you want, I don't mind them if they're stupid, what gets up my nose is a veneer of intelligence, but deep abiding stupidity underneath! The first time I looked at an Apple Macintosh, I switched it on and a Mr Smiley face appeared and words to the effect of 'Please wait...'. After about 30 seconds of this I suddenly thought, I don't WANT a big smiley face telling me to wait, I want the thing to go BONG and there you are! I get very annoyed with the difficulties they put in your way. Mind you the thought of actually going back to a typewriter appalls me!



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**"DO ME A FAVOUR...
PLUG ME INTO A SEGA"**

ACE FLASHBACK!

Tear your hair out, nostalgia freaks. This is the final episode of the great ACE Flashback, covering the entire decade of computer entertainment.

We've had great fun compiling the ACE Flashback, but inevitably we've had to omit some items due to shortage of space. However, we'd be glad to hear from anyone who's got a favourite nostalgia item that's been missed out; just drop us a line at the ACE office marked ACE Nostalgia, and we'll run as many of them as we can find in future issues. The address is 30-32 Farnington Lane, London, EC1R 3AU.

Now, for the last instalment, catch up on 1985-1989; the micro boom is over, but the 16-bit revolution is yet to come!

1986

ARRIVALS AND DEPARTURES

Launch of the year in the UK was the long-awaited debut of the Commodore Amiga, shown at the Commodore Computer show in May in its original A1000 configuration. Hard to recall that this beast would sell you back a cool £1,696.25 at the time, and that Commodore was busy denying its potential as a games machine. Meanwhile the rival 520ST was selling strongly at £800 (with a colour monitor) - Commodore had, in effect, given Alan another year's head start.

The potential of the games console, back in a new and technically advanced form, raised its head with the arrival of the Sega Master System in the autumn. Other new machines were simply variations on a theme: Commodore added an in-built disk drive to the C128 and called it the C128D; later in the year put the C64 into its now-familiar ivory casing; Amstrad added another 256K RAM and a second disk drive to the PCW; the Spectrum became the Spectrum 128 in February and the redesigned Plus 2 version came out in the autumn (see below); Atari produced a megabyte version of the ST, the 1040ST; Acorn upgraded the BBC standard all along last, bringing out the Master series.

CODE MASTERS

Founded, October 1986

Set up by brothers David and Richard Daring and their father Jim, after a year of writing for Masterlark. Prior to that David and Richard had written Vic 20 games as Caltech Software while still at school.

Code Masters publishes on the pile 'em high, sell 'em cheap basis, lots of titles, all at impulse buy prices. An extraordinary high profile PR campaign in 1988-89 by West End consultants Lynne Franks put the Darlings on TV and in the national press, making them one of the very few programming 'celebrities'.
First title: BMX Simulator
Best ever seller: BMX Simulator (all formats)



The Darlings, made media heroes by their PR agency

EVENTS

● Alan Sugar buying out Sir Clive Sinclair was the sort of event that turns up in spoof predictions - in April 1986 it actually happened. No-one was surprised that Sinclair was being bought out, following the Maxwell debacle the previous year. That it should be Amstrad, whose chairman Alan Sugar had been wont to refer to the Spectrum as a 'pregnant calculator', made it the story of the year.

Amstrad spent £5 million on the Sinclair name, its stock and the rights to its technology. Sinclair Research continued to exist and Sir Clive, free from the encumbrance of debts and warehouses piled high with Spectrums and QLS, went on to form Cambridge Computer to develop portable computers. The Z88 came out a year later, and Anamorphic was founded to further research into wafer scale integration. Amstrad dropped the QL like a stone and took just four months to put together the Plus 2 with its conventional keyboard and integral tape deck.

● The Prestel hackers, Steve Gold and Robert Schifreen, made the news again when their case (see 1985) finally came to trial and the pair were found guilty of forgery. The fines totalled £1,350, the costs a further £2,000. Gold and Schifreen immediately appealed and the case ploughed back into the courts.

The ACE Flashback covers the final stretch of the decade, and reveals the Amiga, the PC200, and the console conversion of Ultimate...



The Sega Master system is the first console to stand a chance of mass market penetration in the 1980s, thanks to Virgin.

Birth of the Home PC

Just as significant as the Amiga launch in the long term was Amstrad's decision to up-end the dusty PC market with a range of IBM compatible machines at prices cheaper than much of the software available for them. This was to have serious implications for gamers: until now only the US treated the PC as a home computer but Amstrad's intervention laid the foundation for a similar user base in the UK.

Amstrad did not, however, conduct the low cost clone revolution all on its own. In fact, as component prices continued to fall sharply, the market was wide open for companies such as Spectrum with the Borealis machines. Ours and Tandy to produce PCs at low low prices, between £400-£1,500.

Amstrad's PC1512s, starting at £450, were even cheaper. In addition, you could pick up a PC1512 from a High Street store such as Decca's rather than going through a specialist dealer. And Amstrad's high profile in the press ensured that for a while the word Amstrad meant low-cost business computer in much the same way as Hoover means vacuum cleaner. Amstrad's moves to make PCs affordable may have delighted the masses but the company encountered staunch hostility in the computer world. In a matter of weeks after the launch the word was going round that the PC1512 tended to overheat.

Amstrad acted with characteristic defiance. Alan Sugar called the rumours a pack of lies. 'Apologies were sought and obtained' and in October Amstrad reluctantly initiated a cooling fan in the PC1512s with chairman Alan Sugar making suitably belated remarks about the need for the fan in the first place.

● In May, US Gold, software publishers with the Midas touch, slipped up. It had pulled off a coup in acquiring a computer games licence to the 1986 World Cup and all was set for a sure-fire number one game when the company discovered it was unable to get an original game based on the World Cup out in time.

Outwardly undaunted, the company went ahead with all the intended packaging, the badges, the scorecards, the posters and in the absence of a original program included Aric's two year old World Cup Soccer. Which perhaps wasn't have been a disaster in itself, but World Cup Carnival wasn't being billed as a re-release, and at £9.95, it wasn't priced as one.

WHERE ARE THEY NOW?

ULTIMATE SOFTWARE

Once the undisputed masters of Spectrum programming with hits such as Sabre Wolf, Knight Love and Alien 8. Dropped out of 8-bit programming shortly after being taken on by US Gold at the beginning of 1986.

Leading Ultimate personnel set up a new company, RARE, to develop programs for Nintendo games consoles. Now have no links with the British market.

GAMES OF THE YEAR

Undrum was everyone's idea of the ultimate smooth scrolling shoot 'em up. Starghder, with its 3D graphics and fast scrolling, was one of the first games to demonstrate the potential of the 16-bit machines. Access's golf simulation Leaderboard was a firm favourite for its playability.

1987

ARRIVALS AND DEPARTURES

The launch of the Amiga 500 and A2000 in March gave gamers a straight choice between the A500 and the 520ST as high specification leisure machines. Soft ware houses buckled down to produce bites for the two, although Amiga buyers were often frustrated by publishers' tendency to develop games for the ST and for the Amiga version to be something of an afterthought. But then, at the time, some people were still sceptical about the Amiga 500. It was £100 more expensive than the ST, which by then had been on sale for 18 months.

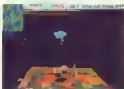
The Spectrum that everyone had been waiting for, the Pirs 3 with a built-in disk drive, did appear in May. And, a year after that Amstrad buy-out, we saw the fruits of Sir Clive's labours since then with the Z88



Trip Hawkins, left Apple and started Electronic Arts

'If it's the difference between people buying the machine or not, I'll stick a bloody fan in it. And if they say they want bright pink spots on it I'll do that too. What's the use of me hanging my head against a brick wall and saying, "You don't need the damn fan, sunshine"?'

Alan Sugar after the 1986 advertising controversy in 1986 (quoted in Financial Weekly, October 1, 1987)



Who Zorch is very written in BASCOM

The game was a wonderfully smooth arcade offering which made most ST and Amiga offerings of the time look suddenly so flimsy and to compound the result, a rumour immediately hurried round the industry that Zorch was just a low line 8-bit Archimedes BASIC. It wasn't of course, but it seemed one of the few adequate ways to explain the power of the Archimedes.

a laptop machine which had started life in another era as Pandora.

Amstrad enhanced its PC series with the launch of the PC1640, and a range of portable machines in the autumn. Amstrad introduced an up-market version of the ST standard, the Mega STs and Commodore began its attempt to go back to its business roots with a range of PC compatibles.

All these machines were widely expected and with the possible exception of the Z88 held little surprises. It was left to Acorn, of all people, to provide the year's most sensational launch with the first Archimedes machines.

The Archimedes 300 and 400 machines used Acorn's own RISC technology - and were something of a world-first at the price. They ran at a terrifying 4 mips (millions of instructions per second), it could display 256 colours from a palette of 4,096 at a screen resolution of 640x512, and the eight voice digital sound could play in glorious stereo. And just in case it wasn't abundantly clear that here was the ultimate games machine made flesh, David Braben had run up a little rumble called Zorch to demonstrate the Archimedes' mouthwatering capabilities.

The Archimedes as games machine debate still rages. The main problem for the original 300s was that while £1,000 was a startlingly low price for a RISC machine, it was too high for a games mpc. Secondly was the problem of support: games programmers were only just getting to grips with the possibilities of the Atan ST, and had scarcely begun to tap the resources of the Amiga's custom chips. That they would all be able to master RISC in their spare time was just too much to ask.

ELECTRONIC ARTS

Founded (US): 1982, (UK): April 1987

Trip Hawkins left his position as director of marketing at Apple Computer to set up Electronic Arts. The company aimed to produce products in the emerging entertainment and creativity market. Alongside games such as Pinball Construction Set, MULE and Archon, the paint, graphics, animation and music Deluxe series



Pinball Construction Set put Electronic Arts on the map

has in its various versions, become a classic. The UK division of Electronic Arts was set up in 1987, publishing European-developed product as well as programs imported from the US.

First title: Pinball Construction Set

Best ever seller: worldwide. Pinball Construction Set (all formats); UK: Popularis (ST, Amiga)

EVENTS

● Viruses hit the news for the first time in November when Amiga owners were startled by the message "Something wonderful has happened - your Amiga is alive". A Virus Killer package was only programmed and distributed if it seemed like a rime day wonder.

● Now that PCs, such as Amstrad 1512 and 1640, were going into the home, it became worthwhile for

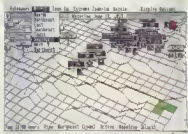
companies to start producing PC games software, or importing from the US, where the PC was outselling the ST and Amiga put together as a home machine. The UK, very slowly, began to catch up.

● In July, Steve Gold and Robert Schifreen, now collectively known as 'The Prestel Hackers', won their appeal against their conviction for forgery after breaking into Prestel mailboxes back in 1985. British Telecom decided to appeal against the appeal, and the case went to the House of Lords.

This saga finally came to an end in 1988, after three years going through the courts, when the Law Lords ruled that the appeal which quashed Gold and Schifreen's convictions, should stand.

GAMES OF THE YEAR

● Universal Military Simulator, from Rainbird, nailed the myth that wargames, however intelligent, had to appear on-screen as though they were programmed on a ZX81.



1985 - changing the face of wargaming.

● Incentive's *Drafter* proved that Great Leaps Forward were still possible on 8-bit machines.

● Nebulus, from Hewson, was a highly original arcade style game, well up to the company's usual standard.

● *Gold of Thieves* established that Magnetic Scrolls' Pawn was only the beginning.

1988

ARRIVALS AND DEPARTURES

After the fumes of previous years, 1988 was a quiet one for new machines. The games market looked settled with the Amiga and ST battling it out for the high end market and the Spectrum, Commodore 64 and CFC taking care of 8-bits. The only unknown quantities were the much-predicted return of the consoles - particularly the rather puzzling fact that while Nintendo was flexing its muscles and cleaning up in Japan and the US, it was virtually invisible in the UK - and was there/wasn't there a boom in PC games? Despite the fact that currently in 1990 software houses are busy producing PC versions left, right, and centre, no-one really seems to know the answer to the last question. Here at ACF we're keen to support PC gamers, but how many there are out there remains a mystery.

In addressing the last question, Amstrad tripped up for the first time. At the same time as launching a set of PCs designed to give Amstrad its break in the

'Pan Am takes good care of you. Marks & Spencer loves you. Secretary cares... at Amstrad: we want your money.'

Well-known Superstars, quoted in *Financial Weekly*, October 1 1987 and many others.



*'Shoot-em ups have come a long way since *Orion*... or have they? Super smooth playability made this Hewson blaster an all time winner.'*

'I believe people are smart, not dumb. If you can give people Rolls Royces for the price of Volkswagens, I'm sure they will buy them.'

Jack Traveni, interviewed at the Cebit exhibition in Hannover, March 1988 about Amstrad's marketing policy.



PC 200 TROUBLE

Demonstrated alongside the PC2000s, which had state of the art VGA graphics screens built in as standard, the chunky DSA display on the hapless PC200 showed up its main failing straightaway. Here we had a PC intended to play games (there were four US Gold titles bundled with it) and its graphics were already out of date. On the other hand the use of an 11.5 inch 5 inch drive rather than a 5 inch version was ahead of its time.

Altogether it was a most un-Amstrad like machine. To make matters worse (and even more uncharacteristically) when supplies of the PC200 reached Comet, many were minus manuals, minus basic minus operating system disks etc. The PC200 got off to a bad start and has never really recovered.

corporate market, it also tacked on a 'home' PC, the Sector PC200.

EVENTS

● Alan Sugar, chairman and founder of Amstrad, and if you believe the Amstrad image making machine, an East End barrow boy made good, although more reliable talk would have it that the man does possess three science A levels was awarded an honorary degree by City University, London.

● After seven years in which the price of chips fell consistently, a succession of measures taken in the USA to protect its own semi-conductor industry against the flood of low-cost chips from Japan led to component prices rising and a worldwide shortage of DRAM (dynamic memory) chips. Hardest hit were the low-cost PC clone manufacturers, with their large memory, low profit machines. Amstrad was forced to raise prices a couple of times during the year. Alan took the opportunity to put the ST back to £399, see below. Only Commodore managed to remain aloof from this pricing sea-saw.

● In June Commodore finally brought the price of Amiga down to £399.99, and sales of the machine took off all long last. For the first time the ST and Amiga were selling on equal terms. The ST had been selling at a standalone £299, but on hiking the price up to £399, Alan put the first of its multi-game bundles together with 20 games in the box as well.



'We want your money.' - Alan Sugar

GAMES OF THE YEAR

● *Robocop*, from Ocean, seemed just like any other film licence at the time. It went straight into the chart at number two at Christmas - few guessed it would still be there a year later.

● Microsoft's *Tetris* was intriguingly developed in the Soviet Union, and proved to be one of the most addictive games of all time.

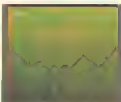
● *Dungeon Master* took the computerised D&D genre several steps further, while EA's *Lightning* combat sim *Interceptor* combined solid 3D graphics with hair raising aerial action.

● *Virus* was the ST and Amiga version of *Zarch*, the game which had wowed everyone at the Archimedes' launch.

AMSTRAD IN TROUBLE

Meanwhile the seemingly invincible Amstrad was having a nightmare of a year. 1988 had seemed bad, with high DRAM prices eating into profits, but 1989 beat it into a cooked ball. First sales of bad news was a hangover from the previous year: the extravagant trial for the first time since going public profits had fallen. Then, as the company struggled to get the PC2000s into the shops, extra parts had to be supplied for the politically faulty hard disk controller in the PC2000, and just a few weeks later a bug surfaced in MS-DOS 4.0, the operating system bundled with the PC2000s.

Worse was to come. In July Amstrad announced it would swap all the hard disks in the PC2000 and 2386 after the controller continued to throw up problems. Come October and the City's worst fears were confirmed as profits collapsed. £76 million sounds a lot, but this is compared to £180 million the previous year, and Amstrad admitted it had £350 million worth of stock in its warehouses.



Super Mario Land may not look much on the Gameboy, but it plays as well as its bigger brother on the Nintendo colour console.

SAYINGS OF THE YEAR

'Like your Aunt Ethel it never seems to go away'

Commodore on the C54
(New Computer Express 14.1.89)

A dramatic gesture is now needed to overcome any suggestion that this company is falling in its duty to supply reliable products'

'The dramatic gesture was the exchange of all hard disks on its PC2286 and 2386 machines. (Amstrad company statement issued July 1989)



The A3000 (cheaper) RISC power from Amstrad

1989

ARRIVALS AND DEPARTURES

As far as Commodore and Atari were concerned, business was war. Commodore opened fire by introducing an Amiga offer with the A500. Atari responded by bundling games like billy-oh with the 520ST; Commodore put together a package around the much-hyped Bahrain film, Atari bundled yet more games. Commodore announced a had sold 200,000 A500s in the UK, Atari disputed its figures.

Suddenly there were alternatives on offer. The console comeback actually happened - despite itself. Virgin used all the marketing muscle at its disposal to keep the Sega in the public eye, and Nintendo consoles finally began to move off the shelves (though according to ACE reader research they still account for only a fraction of consoles sold); NEC didn't launch the PC Engine, but people imported them anyway. Nintendo's handheld Gameboys were imported, begged, borrowed and stolen, thanks largely to the inclusion of Tetris with the machine.

Acorn caused another stir with its low-cost Archimedes derived machine, the A3000. Much waiting and gnashing of teeth from software house, press and the public: at £1,000 including a monitor, it's still not cheap enough. But Acorn made some efforts to woo the mainstream software publishers and at the end of the year, the jury is still out regarding the A3000's future.

EVENTS

● The virus problem became acute, though this was partly due to the surrounding hype. Publicity encouraged some programmers to devise their own viruses; fear of infection led some people to attribute any glitch, crash, or bug to a virus. The virus detectors programs and people had a field day.

Many so-called viruses, such as the Friday 13th program, appeared to be more the product of hype than a concrete threat. The full effects of the 'Aids' virus, which claims to be waiting to wipe hard disks, have yet to be seen.

● The Konix Multi-System burst into the limelight at the Toy Fair in January with a prototype console and its imaginative add-on, the hydraulic chair. The press and software publishers were captivated and esoteric articles appeared. Konix went back to its headquarters high above Ebbw Vale and prepared for the Multi-System's grand launch at the PC show in September.

In the event, the grand launch turned into a nightmare of embarrassment, as the system failed to turn up until a couple of pre-production machines stuttered into action on the last two days. The chair was still a prototype.

Meanwhile the media remained relatively quiet, unwilling to broadcast the open secret that Konix had run out of money to bring the Multi-System into production, just in case adverse publicity caused the whole house of cards to collapse. The problem appeared to be alleviated in October when distributor Add-Ons took a stake in the company. The Konix saga continues into the 1990s.

● Another machine for which much was promised and which nearly didn't make it in the 80s was the Sam Coupe, a Spectrum-compatible games machine with sophisticated graphics and sound capabilities devel-



Butner has it that Amstrad offered millions for the racing chair and that Kents turned them down.

oped by Miss Gordon Technology. Like the Konix, Sam also suffered delays before an initial production run of just over 800 units shipped in December.

● Hacking should have been one of 1989's big stories. In the end it proved a non-event. Tony MP Emma Nicholson gained a lot of publicity for her Private Members Bill, but withdrew it when it was apparent there would be no time to discuss it in the Commons. The Law Commission published a report recommending a maximum punishment of five years in prison for people convicted of altering computer data having gained unauthorised access to a system, but no anti-hacking bill was included in the Government's legislative programme.

● Electronic Arts introduced 16-bit budget titles with back catalogue releases at £19.99, then US Gold after the success of its 8-bit budget label Kixx, set up Klassix, also at £9.99. But who else but Mastertronic should decide that this was far too much and at the end of the year launch at range of 16-bit games for £4.99?

MICROPROSE

Founded (US) 1982, (UK) 1986

Major: Wild Bill Stealey, management consultant and ex-US Air Force and Sid Meier, programmer with General Instruments, founded Microprose to develop flight simulator programs with an eye to detail and authenticity.

Was part of the US Gold stable until the end of 1986, when Microprose set up in the UK. Enjoyed success with Gunship, Silent Service etc, but underwent huge upheavals in 1989 with the acquisition of the BT Telecommunications conglomerate and the departure of UK MD Stewart Bell and affiliate label Origin shortly afterwards. Now have 55 staff in UK.

First title: Helix Ace

Best ever seller: Gunship (all versions)

GAMES OF THE YEAR

● Popular appeal to the megalomaniac in everyone as you played God with your people and lands. Metaculous programming and eerie sound effects gave weight to this original effort.

● Hardly original, but winning all the plaudits for 16-bit playability was Acorn's Kick Off, with its smooth, fast, football action.

● Flight simulators have traditionally been of a consistently high standard, but Microsoft's Falcon showed there was still plenty to learn.

DRAGONS BREATH



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TOWER OF BABEL

Tower of Babel is an intricate 3D strategy game involving an interconnecting network of towers, platforms and lifts all rendered in solid 3D with innovative light and shading techniques. Take control of robot spiders and program them to solve problems and puzzles and interact with other creatures, such as Pushers, Zappers and Grabbers. Alternatively, real time control is available to you at any time for instantaneous reaction to the game's developments. For the more adventurous among you, there is a complete game designer, allowing the construction of your own series of towers, platforms and lifts. Attempt to fox your friends with your own fiendishly difficult creations. More than just a game, more than just a puzzle — Tower of Babel is a whole new concept in strategy gaming.

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TRICKS 'N' TACTICS

BECOME PART OF THE DUNGEON MASTER LEGEND WITH TNT



The Ultimate DUNGEON MASTER Guide

Part Two

ITEMS TO BE FOUND BEHIND THE TURQUOISE DOORS ON LEVEL 7

Door 1 - Gem of Ages; Sceptre of Life Humuley

Door 2 - Dragon spit. A pair of Boots of Speed

Door 3 - Crown of Nerra; Magic Box

Door 4 - Flamebalm, Bolt Blade

KEYS

There are many keys that must be found to pass through the levels, the most notable of which are these:

RA Keys - These are found on levels 3, 7, 9, & 12. These keys open doors within level 7.

Master Key - Found on level 12. Opens a door on level 7.

Ruby Key - Found on level 11. Opens a door on level 7.

Winged Key - Found on level 7. Allows access to Dragon Level (14).

CLOTHING

There is a vast amount of clothing to be found on all levels. Your characters should be fully dressed in the 'toughest' items as they are found. Most important is the armour which should be worn by your front two characters (fighters). The most useful worn items are listed below:

Armour of Darc - Found on level 12. Makes you harder to see.

Armour of Lyte - Found on levels 10, 11, & 12. Lighter in weight.

Flamebalm - +12 to Anti-fire. Leg Mail, Leg Plate, Mitral Ake-lon, Mitral Mail, Basenett, Helmet - these items are found throughout the dungeon.

It is advisable not to wear the armour - dropped by Chaos Knights, as it is cursed.

SHIELDS

Shields are numerous and important for protection. They should where possible be carried at all times.

Buckler

Small Shield

Wooden Shield (dropped by skeletons when they die)

Large Shield

SHIELD of Darc

Shield of Lyta

EXPERIENCE LEVELS

As you pass through the levels you gain experience in the four disciplines: Wizard, Ninja, Fighter, and Priest. Your level of expertise increases in the following order:

Neophyte

Novice

Apprentice

Journeyman

Craftsman

Artisan

Adept

Expert

CHARACTERS AVAILABLE AT THE START OF THE GAME

NAME	SKILLS	HLTH	STAM	MANA	ITEMS
ALEX	App NINJA Nov WIZARD	50	57	13	Sing
AIZO	Nov FIGHTER App NINJA	51	77	7	Hide Shield 2 Daggers Rabbit's Foot
BORIS	Nov NINJA App WIZARD	35	65	28	Moonstone
CHANI	Nov FIGHTER App WIZARD	47	67	20	
DAROD	Nov FIGHTER Nov WIZARD	100	65	6	
ELUA	Nov FIGHTER App PRIEST	60	58	22	Magic Box
GANDO	App NINJA Nov WIZARD	39	63	26	2 Poison Darts
GOTHMOG HALK	Jny WIZARD Jny FIGHTER	60	55	18	Cloak of Night Helmet Wooden Club 2 Arrows
HAWK	Nov FIGHTER App PRIEST	70	85	10	
HISSA	App FIGHTER Nov NINJA	80	61	5	
IADO	App FIGHTER Nov PRIEST	48	65	11	Samurai Sword
LEIF	App FIGHTER Nov PRIEST	75	70	7	
LEYLA	Jny NINJA	48	60	3	Rope
LINFAS	App FIGHTER Nov WIZARD	65	50	12	Box
MOPHIUS NAB	Jny PRIEST App PRIEST	55	55	19	3 Foods Staff
SONJA	Nov WIZARD Jny FIGHTER	55	65	15	
STANNA SVRA	Jny FIGHTER Nov PRIEST	75	80	0	Axe
TIGGY	Nov WIZARD App WIZARD	53	72	15	Apple
WUTSE	Nov NINJA App PRIEST	25	45	36	Wand
WULF	Nov NINJA App PRIEST	45	47	20	3 Throwing Stars
ZED	App NINJA App PRIEST	40	50	30	Empty Flask
	Nov FIGHTER Nov NINJA Nov PRIEST Nov WIZARD	60	60	10	Torch

Master
LD Master
UM Master
ON Master
EE Master
PAL Master
MON Master
ARCH Master

SPELLS

Power
LO UM ON EE PAL MON
Elemental Influence
YA VI OH FUL DES ZO
Form
VEN EW KATH IR BRO GOR

Alignment:
KU ROS DAIN NETA RA SAR

POTIONS

W Health
YA Stamina
VI BRO Poison Cure
IR BRO Magical Shield
OES VEN Poison Potion
YA BRO DAIN Wisdom
YA BRO NETA Vitality
OH BRO ROS Dexterity
FUL BRO KU Strength
ZO BRO DAIN Moxa

The character creating these potions must have an empty flask in hand.

SPELLS

FUL	Magical Torch
YAR FR	Magical shield (Group)
ZO	Opens Some Doors
DES VEN	Poison Spell
OH VEN	Cloud of Poison
DES EW	Anti-Ghost Spell (All non-material beings)
VA BRO ROS	Magical Footprints
OH KATH RA	Lightning Bolt
FUL R	Fireball
FUL WID HETA	Fireshield
OH EW RA	Magic Vision
OH EW SAR	Invisibility
OH FR RA	Create Light
DES IR SAR	Create Darkness
ZO CATH RA	Create Plasma (to free power gem)

BEASTS OF THE DUNGEON

There are many different creatures to meet in your journey. It is not always necessary to fight them all, many can be run around, lured into rooms and shut in, or simply run away from.

All creatures are unique in that they all have their own Achilles heels and respond to you differently, some can be driven away while others are unrelenting in their pursuit and ferocity. The following is a complete list of creatures plus information to help you overcome them.

Mummies The first monsters to be encountered. Easy to kill on all levels. Fight, range weapons to kill. Found on levels 2, 3 & 8.

Screamers Easy to kill, fight, throw items, range weapons. Due to the small damage they do to you and their slow pursuit, these creatures are ideal to practice all combat skills on. One room towards the end of level 4 regenerates them, an ideal place to practice. They can also be eaten, first found on level 2.

Blue Ogres These creatures use wooden clubs and can cause serious damage to you partly early on. Relatively easy to kill, not too fast in their pursuit of you, first found on level 3.

Rock Monsters Hard to kill and poison you when they strike. Very slow moving and thus ideal for in/out attacks also use fireball. You can drop them into pits useful in The Room of the Gem.

Ghosts Fairly swift in their pursuit and can pass through closed doors. Use disrupt, dispel, DES EW, or verbal blade. Found first



on level 4.

Pink Worms Ferocious creatures that will do considerable damage and poison you. I favour fireballs, range weapons and rear attacks, keep poison crates handy. Found first on level 4.

Giant Wasps These are amongst the toughest creatures you will meet. Don't bother with in/out attacks. Quite easy to kill, try to get off a fireball before they reach you, if forced to fight head to head, have poison crates handy. Found first on level 4.

Green tentacle monsters These strange looking creatures are fairly easy to kill and slow in their pursuit. They throw lumps of poison at you. Fireballs and range weapons are advised. Found first on level 5.

Flying snakes Quick moving and hence, these creatures inflict serious damage and poison you partly. Not hard to kill, fight and fireball. Found first on level 5.

Pixies Most annoying creatures, they do no damage, but steal whatever you have in your left hand. A fireball, or if you are quick enough, a swift blow should do away with them. They giggle just before they steal from you out of interest, if you are asleep and any creatures attack you, you automatically awake – not so with pixies.

Giant Rats Quite resilient these beasts. They often attack in pairs doing considerable damage. In/out attacks are advised, also range weapons, fireballs and light rings. Found first on level 9.

Beholders Large tentacled eyeballs that float above the ground. Be careful of in/out attacks as they throw magic over some distance. I prefer range weapons and magic. Worth bearing in mind is that they are the only creatures able to open doors and gates.

Mini Dinosaurs Very few of these will be encountered. Although slow they take a lot of hits and deliver a rare blow with

their tails. Fireballs and in/out attacks reap their rewards. Found first on level 9.

Small Sorcerers Not many to be found. They throw powerful magic at you but are quite easy to kill with magic and fighting. Beware! When attacked they often transport a short distance, perhaps to your side and hit you before you realise. Good Policy – if they transport, turn on the spot quickly to look for them. Found first on level 9.

Golden Scorpions Very resilient beasts, requiring a lot of fireballs and in/out hacking. Beware of that poisonous tail, they move fast, quickly when in pursuit. Found first on level 10.

Insubstantial Triffid A non-material creature that tides in and out of vision. While solid, a fireball can be used to dispel, disrupt, DES EW and verbal blade are preferred. They throw powerful magic at you. Found first on level 12.

Giant Spiders Although large, no great problem. A nasty bite but in/out hacking and magic do the job. The morningstar weapon is quite effective. Found first on level 12.

Chaos Knights Another hard one to kill. Often attack in pairs doing a lot of damage to you. Fireballs are favoured along with dropping down pits where available. Don't wear the armor, it is supposed to be cursed. Found first on level 12.

Water Elementals Pools of water that follow you, rearing up and doing damage. Cast a calm spell (from wand) and in with the verbal blade, DES EW, disrupt and dispel. A few swift blows on the horn of fear will cause them to retreat making attack easy. Note! They can pursue through closed doors by flowing underneath. Found first on level 11.

Stone Golem Only 5 of these exist, all on level 11 guarding the Tomb of the Fiend. Very hard to destroy, taking many fireballs to get rid of. They drop a stone club which is too heavy to be of any use.

Devils Found only on level 13 guarding Lord Chaos. They throw powerful fireballs and head to head combat is not advised. Cast fireballs at them from a distance.

Dragon Average in its speed but unrivalled in its ferocity. Only one fireball is required to kill you. Chase him round the pillar on level 14 attacking his rear with many hits and much magic.

Lord Chaos The man himself! All conventional attacks are useless, you must first enclose him in a flux cage and fuse him with the Fiendstaff. Many attempts may be required to kill him as he has the habit of transporting away throwing powerful magic.

False Grey Lord If you retrieve the Fiendstaff and attempt to leave the dungeon you will meet this person. See what he does, but be advised, you won't like it.

SOME COMBAT TIPS TO HELP YOU GET THROUGH ALEVEL

In most cases head to head combat is not advised, preferred is the in/out attack as most creatures allow you to get in the last blow.

Trapping creatures under gales is very effective because it damages them along with your fighting.

Magic Freeze Boxes and the Eye of Time should be put to good use, sometimes to escape, but better used when a creature is under a gate. This is very effective against the more resilient beasts (dragons, scorpions, spiders, stone golems etc.).

Dropping creatures down pits is effective, but doesn't always kill them and they may step into a transporter, reappearing at a most inconvenient time and bad place. Try to weaken them first before dropping.

Always have VI potions on hand for instant curing along with VI BRO (Anti-Poison) potions when fighting venomous beasts.

Beware of retreating into dead ends. Even leaping into a pit may be more acceptable than fighting overwhelming odds, it gives you time to recuperate.

Frequent saving is advised, especially after a big fight or solving a lengthy problem to save you having to re-do too much if you die.

OK that's all for this month. In the next instalment we have a guide to the first eight levels of the game.

NOT SO CHAOTIC CHAOS!

Would you believe it? There I am telling you that Chaos Strikes Back is the hardest thing since the Star of India and I've already heard from two people who have completed it! One of them is Ian Urquhart of London who has supplied a map of the first part of level 1 in order to get you going.

KEY

- L = Lever
- T = Teleport/Twister
- B = Button
- Sl = Slot
- = Pad
- = Pit
- A = Alcove
- F = Fountain



TNT

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A TNT Survival Guide

We recently received a plea for help from **Stuart Doe of Leicester**. He writes: "your Tricks and Tactics section is my personal helpline, but I find it difficult to follow some items... some of us have only just arrived on the scene and... the maze of phrases such as Poise, Bytes, Bits, etc. mean very little at most, and at worst nothing at all. So how about a section for beginners with some of the more common phrases and practices being listed and explained?"

This is quite a frequent request so we thought that it was about time that **TNT** gave a bit of a helping hand to those readers who occasionally find the pages a little difficult to understand. If you are a more experienced reader then please bear with us, and remember that everyone has to start somewhere.

A PIG OF A POKE

The word **POKE** originated as an instruction in the **BASIC** computer language. It was the only way, in the original **BASIC** dialect, of

directly altering the contents of the computer's internal memory. Most home computer games end up as **machine code programs** (even if they are originally written in a **high-level language** like **C** or **BASIC**). This makes it difficult for the **hacker** to customise or adjust the program code. The easiest way to do this is by using the aforementioned **POKE** instruction to directly change parts of the program that perform specific functions (such as removing a life when you crash your mega blaster mix V).

As an example, in a game written in **Z80 machine code**, for the Spectrum or Amstrad CPC (for instance, there might be some instructions such as

```
LD A,(LIVES)
DEC A
.
.
LD (LIVES),A
```

These instructions are stored in the computer's memory as follows:

3A 00 80
3D

.

.

.

32 00 8D

Each one of these numbers (a **hexadecimal number** in base 16) is known as a **byte**. Each **byte** has a number, known as an **address**, associated with it which indicates its location in the computer's memory. The **POKE** instruction directly alters the **byte** at one of these **addresses**.

Never mind about the exact meaning of the lines of code above, suffice it to say that each time the computer comes to them it removes another life. To make a new version of the program in which lives are not removed we would have to replace the **DEC A** instruction with a **NOP** instruction. This makes the computer do nothing at all rather than removing a life. Supposing that the **byte** representing this instruction resides at **address 32779**. The instruction to replace it with the code for **NOP** (which is D) is **POKE 32779,D**.

There are two basic ways of using a **POKE**. The first, and easiest is to use a device like **Romantic Robot's Multiface**

This is a hardware device that plugs into your computer's expansion port and allows you to pause the program that is running and directly alter sections of the program. Because of the ease with which this is done, I recommend that beginners who can afford to do so buy one of these.

If you do not have a device of this nature you must load the program code in such a way that the game does not run automatically, then make the necessary alterations, and finally start the game running manually. The methods of doing this vary from machine to machine. Over the next couple of months I will be showing you techniques for some of the popular machines as well as providing some more in-depth info on the contents of these pages.

I hope that has enlightened Stuart and others a little. One thing Stuart does say in his letter is 'please don't tell me to read a book as this only confuses me more!' Well, point taken, but I do recommend that you buy something like **The Penguin Dictionary of Computers**, which provides reasonably comprehensive definitions of the terms used here and in other publications **MORE SGA SENSATIONS**.

Here are a few little pick-me-ups for ailing Sega Master System owners from Andrew Hadden of Essex.

TIME SOLDIERS

On the last battle keep to the right of the screen when scrolling up. When you reach the first bloke quickly run to the right and up so you are to the side of it. Now fire continuously at its face, but watch out as it fires two red bullets every eight seconds. When it does move up then back down. Oh yeah the second to last boss spits balls so stay at the bottom of the screen. When he goes to the top turn and fire then repeat this (see diagram). I think this game has the most unrewarding end screen of all time. It just says "CONGRATULATIONS!"



©1988 Sega Enterprises Ltd.

To get 26000 or more on every go on the half pipe, do this

- 1) Don't fall off!
- 2) Just do hand plants
- 3) Keep finger on button 2 to do



handplants the longer you hold the button the higher you score

- 4) Between handplants push down if going up and up if going down

In the footbag event variety is the best way to gain points, so do different moves, not the same move all the time

As soon as the surfing event starts push both buttons - this slows the board down. Push top the right (as per manual) do this until the wave is just over the board and then let go of the buttons. Keep turning the board up and down to gain speed in order to get out of the wave. Now do five normal jumps (45°) and three or more straight up jumps. Now turn the board through 360° about two or more times using buttons 2 and 1. I know this sounds like a lot to do, but with practice it can be done. If you do what I've suggested you can score 90 and be a mega buff like me!

Whenever there is an obstacle in the way in the skating event, jump it (obvious really!) But if an obstacle is to the side of you jump anyway

because you score as if you were jumping a true obstacle. When there are parts of the sidewalk missing press the button as shown in the diagram. Over 4000 can be scored in this way.



In the BMX event tabletop the logs on the ground. Do back flips on the small bumps (button 1 and right). On big bumps do forward flips (button 1 and left). See the diagram for what to do with other bumps. At the end press button 1 and left.

In the freestyle event always catch the first bee overhead (See diagram). You get massive points (350 in fact). Do this by pushing down when the freestyle is half way up the screen and roughly one screen away.



CORNER

CONSOLE

MEET THE MAESTROS

Now's your chance to confront the teams that code and publish the games you play...in person. Check out the ACE Conference program for Spring 1990.

The ACE Conferences offer you the chance to join a small select band of ACE readers who will be able to exert real influence on the way games are produced in Britain. It's all part of the ACE 1990 Campaign to improve communication both within the games industry and between gamers and the world at large.

Here's how it works. Each month we'll be arranging with a British software house for a group of ACE readers to visit them, meet the people who produce the games, ask questions, and make their own opinions known. Software houses are always keen to hear from games players: now's your chance to make sure you're one of the ones they hear from.

WHAT HAPPENS

Once you've been selected for a particular conference (see What You Have To Do box), you'll be informed of the exact date and venue. You'll need to get there under your own steam so be sure to apply for conferences that aren't too far away from where you live. Don't worry if the nearest conferences listed are not in your area: there'll be more in the near future and we'll be covering the whole country, including Scotland, Wales, and Cornwall.

Conferences normally start at 12.00 noon and carry on to around 4.30. You get a buffet lunch and refreshment and when you leave we'll also thrust an exclusive ACE T-shirt into your grubby hands. The software house may well have some goodies to hand out as well.

However, the real goodies will come from being able to talk directly to the software maestros themselves. They'll be ready to answer any questions you may have -



Duke's Hard Drive - Just one of the games you can check out in this month's conference.

and to defend their honour vigorously if you get stropful. Obviously no-one likes to be slagged off for no good reason, but if you have constructive criticisms or strong feelings about a game, you can be sure that they'll be just as well received as praise of praise.

And, of course, you'll also have the chance to meet members of the ACE Team, who will be just as keen to hear what you have to say as the software boys.

ON THE PROGRAMME

Here are three conferences that you can apply for this month. They are mostly in the SW area - next month we'll be moving northwards.

Antivision

Now chance to link to the company who have produced games ranging from the iconic *Line Computer People* to the ingenious *Cosmic Ome* and the roaring *Super Hang on*.

Doma-k

Meet the lads who've got the license to the superb *Star Runner* who duke the Atari console licenses under the Tengen label and put their foot down with *Hard Drive*.

Electronik Arts

LA have a great modern office building and are typical of the new breed of highly successful American subsidiaries in the UK. They've brought you games ranging from the excellent *Battle Tards* series to *Deluxe Paint* and the sky-busting *Interceptor*.



Star Runner - You could have an animated afternoons ahead of you.

WHAT YOU HAVE TO DO

Each month we'll let you know about forthcoming conferences around the country. If you think you might be interested in attending one, all you have to do is send us a **postcard with your name and address** clearly written, together with a **daytime telephone number** if at all possible. You also need to tell us **which conference** you would be interested in attending (one choice only, please) and **your age**. We need to know how old you are so that we can ensure a good spread of age groups at each conference.

Unfortunately we have to limit the number of people attending each conference to 15. In addition, we have to make a nominal charge of £5.00 to help cover costs. All places are allocated on a first-come, first-served basis. There is however an exception to both these conditions: as a special offer to subscribers we are giving them **priority allocations** for the first ten places in each conference and they may also attend **free of charge**. You can find out how to become a subscriber on page 49 (and you get other benefits too - a free issue, a special newsletter, and guaranteed delivery).

As soon as we decide on a time and venue for a conference, we'll select the lucky readers from those who have applied and inform of the relevant details. If anyone can't attend, they'll be shortlisted for a future conference and another selection will be made for someone who can take their place.

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ACE NEW WORLDS

PAT WINSTANLEY CHECKS OUT THE LATEST FANTASY SOFTWARE

DRAGONS OF FLAME

Forget what I said a couple of months ago about the hack and slay element being toned down in this follow up to the *Heroes of the Lance*. Having finally managed to get my hands on a joystick I've been hacked about and slain more times than I can count in the past few days. This game is hard!

You begin by controlling the eight Companions of the Lance. Tanks the half elf, Caramon the fighter, Raistlin the mage, Goldmoon the cleric, Sturm the trane knight, Riverwind the plainsman, Flint the dwarf and Tasslehoff Burfoot the impressible Kender. As you travel you will also meet up with several non-hostile characters who may join your party and offer information and fighting skills.

As you attempt to fulfil your quest you may come across a variety of useful items. Acquiring an item increases your experience points and once taken can often be used by



The graphics presentation of *RPGs* will have progressed very far, but as you can see from *DOP* things are getting better - slowly.

CHAOTIC HINTS & TITBITS

Any *Dungeon Master* fans out there with an ST who haven't yet bought *Chaos Strikes Back* - shame on you. For those who have but are stuck, a few tips.

Counting the start as level 0 there are five levels below and at least 4 above.

Level (-5) has four main areas each of which has at least one exit through a solid wall which leads back to the main junction

US GOLD continue the well received series of adventure games based around TSR's *Dragonlance* books with the sequel to *Heroes of the Lance*

accessing the menu. Apart from extra weapons and armour, rings and potions can be found to enhance a character's abilities or perhaps heal a nasty wound. Since Goldmoon's stock of healing spells doesn't last long you'd be well advised to find some potions fast.

While weapons may be used in different ways and have different ranges this is not always particularly useful. Obviously, keeping your distance from monsters is desirable, but doing so in practice is well nigh impossible. As combat is joined the display changes from overhead to side on and any sense of direction you might have had flies away. This wouldn't be too bad if monsters only came at you from left or right, but when they appear both in front of and behind you without warning you'd better

Count the screams when you fail to judge the depth of drop.

Drop down a hidden pit in Dain and you'll find yourself apparently trapped between four walls - simply step back wards (and look out for worms!).

At the Parting of the Ways, leaving the relevant objects in the alcoves lets you change your mind.

There are an awful lot of false walls! Anyone found a use for the "key of B" yet? - I've a chest full of the things.

Hope you're having as much fun as me - cancel everything for a month

start praying.

As for the monsters, on the overhead map they appear very similar to each other but in close up there's a wealth of difference. *Dragonlance* comes in two forms, Baaz and Bozak. Of the two the unarmoured Bozaks are the more dangerous as they explode when killed marring anyone too close. Other monstrosities include garrill wasps, griffons, trolls and wyverns. Each monster type is best tackled by a specific strategy. Thus war dogs will fight to the death - unless you feed them in which case they run away.

With all this going on it's easy to lose sight of your objective, your quest to free the slaves of Pax Thaskas and recover the lost Wyrmslayer. I can't see too many players getting that far unless they have the patience of a saint. Although more of an arcade adventure than a sedate RPG (like *Dungeon Master*) a save feature is incorporated. Whether you'll last out long enough to make saving worthwhile is another matter.

As an avid fan of the *Dragonlance* books both *Heroes* and this follow up are something of a disappointment to me as both rely far more on joystick waggling than strategy. However those of you with faster reactions and more practice at karate style games will probably find *Dragons of Flame* a good mix of exploration and combat.

LANDSCAPE85
Although well drawn and colourful, movement in the close-up mode is desperately confusing.

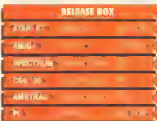
ENCOUNTERS65
There's just no time for tactical weapons. Party members are often dead before they have a chance to strike a blow.

CHALLENGE65
There's not much challenge in any game that starts off almost impenetrable and stays there. It's far too hard for the average player.

SYSTEM75
I doubt any system which gives no alternative to the joystick.

ACE RATING 720

The *Champions* are simply too weak to allow the player much satisfaction. It may be true (fantasy) life but as a game it will be far too difficult for most.



Way back in issue 25 Steve Cooke checked out a preview copy of EA's *Hound of Shadow*. Now that the finished product is here, how does it measure up? *Hound of Shadow* is presented as an RPG text adventure with full screen graphics in several locations. The system allows you to create a distinctive character with which to tackle the adventure. Your character can be saved at the end of the game for use in future products together with all the experience he or she has acquired while solving the Hound.

Character creation is quite separate from the game itself but has a profound influence on the way the plot unfolds and the difficulties you will face. You may choose from a variety of pre-defined characters which come with the game including an American-irish cop turned Private



HOUND OF SHADOW

Eye, a baronet with a passion for flying and a doctor's daughter making a living from writing novels.

If you don't fancy any of these you are free to generate your own character who may have a profession such as gentleman adventurer or psychic investigator. You then define your skills which include riding, hacking, escapeology, archeology, anthropology, photography and astrology to name but a few. These skills will determine the way you play the game as information is offered or withheld depending upon your skill range and strength.

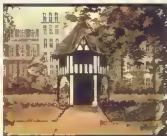
Set in and around London in the 1920's the plot revolves around a mysterious and horrifying force which you first encounter at a seance. Although you are certain that the medium is a fake he apparently becomes possessed during the proceedings and with a strange voice warns one of your fellow patrons that he bears the mark of the hound. Your companion recognises the voice used by the medium as that of a woman encountered in horribly mysterious circumstances in America.

Together you set out to find more back ground at the Reading Room of the British Museum while becoming more aware as time passes that you are both in deadly danger. Initially puzzles are few as are objects and play revolves around meeting different people at certain times to glean information. In fact the opening part of the game rather leads you by the nose as you follow instructions given in the text. Only when you have collected all the information you need are you free to explore further afield in a more traditional way.

One aid to exploring is the existence of mysterious magical gates which are scattered around the playing area and act as teleport

Electronic Arts have finally released the definitive version of this RPG-influenced horror epic.

The idea of a black magic, H.P. Lovecraft scenario set in the 1920's sounds like a sure fire hit...but is it?



← Eldritch Games, who produced HOS for Electronic Arts; can Chris Elliott and Richard Edwards squeeze more out of the Timeline system each time?

points. Instead of tediously catching a train from East Ankle to London you simply step on a gate, chant the correct phrase and woot! The gates are simply drawn on the ground and although you can't create new ones, existing ones can be wiped away by enthusiastic graffiti cleaners.

The Timeline system itself has a few problems. In order to maintain the flow of the plot you occasionally find yourself in a kind of loop which will not let you out until you make the required action. Apart from being very frustrating this also spoils the atmosphere of the game. There also appears to be something of a random element involved. Using one of the pre-defined characters whose skills include photography I began a game from scratch twice. In one version I discovered a camera in my room and wandered round London happily snapping away. In the second try - no camera!

Interaction of the parser with the plot flow can cause frustration too. A command such as ENTER SHOP will be obeyed early in the game to put you inside a useful bookshop. Later (presumably when all required actions have been performed [here] the same command elicits a plaintive I DON'T POSSIBLE. Similarly the very useful GO command produces an erratic range of responses when used with identical destinations and circumstances. Having spent a good deal of time wrestling with the game I feel that many improvements and refinements are required before Timeline is used for other plots. In the end, frustration with the system outweighed my desire to solve the plot puzzles. Having said that I do look forward to future releases on the system.

RELEASE BOX		
ATARI ST	£24.99k	OUT NOW
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LANDSCAPE 80
Heavily atmospheric with digitised graphics - but they can't be turned off (even you've seen them). The first glimpse will bleed, gasp and heave.

ENCOUNTERS 80
Non-player characters simply ignore you if you can't give them the right (programmed-in) response. Conversation is very frustrating.

CHALLENGE 75
Puzzles being laid by the devil at every step you are constantly goaded into complete frustration. This is not an easy game.

SYSTEM 80
As a novice Timeline just doesn't hang together well enough to be transparent to the player seeking puzzles of his own to be solved before getting on with the game.

ACE RATING
650

As a first attempt with the Timeline system, *Hound of Shadow* is rather a mixture. This is not a game for beginners but could prove an enjoyable challenge for patient experienced adventurers.

TIME

EMPIRE break the time barrier. Should you follow them?

As text adventures fade into obscurity their place is being taken by icon driven systems which, while making play more attractive for the novice and younger player, can cause immense frustrations to those preferring more flexibility of input if they're not well-designed.

Set on the satellite Histonal as it travels its geocentric orbit around earth, your first task is to discover what you are supposed to be doing. It seems that time machines can now give access to the future through which it has been discovered that robots are going to devastate the earth unless they are stopped in the present. That's where you come in. By solving puzzles and talking to people you must gain access to various time zones to stop the rot.

Screen layout consists of a small window showing your location and other characters in the game against various horizontally scrolling backdrops. Beneath this is a row of icons which allow you to get, drop and examine objects, direct your character's movements and talk to other characters.

Objects themselves are scattered throughout the game - but you can't see them until

you pick them up. The only indication you have is one of the icons - an eye which opens as you pass something of interest. Clicking on the eye then shows the object but doesn't say what it is. Although objects are well drawn, their identities can be something of a mystery. Thus what I thought to be a rather fat white ring to be worn actually turned out to be a certain brand of mint.

The only way to discover information is by talking to people - simply move next to your potential victim and click on the talk icon. If the character has something to say to you they will do so but you can't ask questions or direct them (except occasionally by offering them objects). Dialogue brings out a variety of personalities ranging from a receptionist who seems to be half in love with you to a small boy who, when bribed with a toffee, tags along

behind like an unwanted puppy.

Having found the time machines you can travel back to well known scenes from the past which include the battlefields of the Crusades, the lions of the Colosseum and even a brush with Merlin. In all there are over 100 beautifully illustrated locations to explore and numerous characters to meet and interact with.

Apart from the niggles about objects, this should keep you puzzling happily for hours.

LANDSCAPE

Beautiful graphics are very nice but forget where you've dropped an object and you'll soon find them tedious!

ENCOUNTERS

Informative and often hilarious dialogue presents non-player characters as three dimensional personalities.

CHALLENGE

Puzzles often have 'trial and error' solutions rather than offering an exercise in logic.

SYSTEM

Despite the limitations of an icon driven system, the game is easy to control with many nice touches.

ACE RATING 750

While *Time* is nothing exceptional its moderate difficulty level should appeal to most adventurers. Well worth a look.

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IK+

They called International Karate "the greatest Karate beam 'em up yet" (Commodore User).

And who are we to argue? But ARCHER MACLEAN has come up with a stunner: A third fighter. An amazing animated background. New moves (including double head-kick and a spectacular backflip).

Re-mixed music by ROB HUBBARD And balls!
© 1987 Archer Maclean.
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BIO CHALLENGE

For centuries mankind has been on the same. The genes that each generation of humans passes on to their offspring are becoming weaker. The human body will soon become too frail to survive. Privately, scientists agree to have the answer. They have discovered a revolutionary technique to graft the human brain into the body of a robot.

The results of these experiments are to be tested in the BIO CHALLENGE — the ultimate survival.

You are a K.L.I.T.—the latest generation of human-robot engineering—in an extremely sophisticated human brain in a highly maneuverable precision-engineered steel body. Your only mission is to survive. For the human race.

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VOYAGER

In 1977 Voyager II was launched — leaving all life forms in the Universe to seek our planet. Our sturdy company's coming, Luke Skywalker — returning to Earth after completing a 50 year sentence of "investigative exploration" is not a man you'd wish to meet. After half a century of solitude, he's bored and hungry. On Earth the gate crashers are about to arrive — they are the ROMZ, but Skywalker has got other ideas — NO-ONE, but NO-ONE is going to spoil his home-coming party!

© Ocean Software Ltd. 1988

R-TYPE

Deep in the cosmos, the ultimate warrior, The R-Type Empire — evil, horrific, deadly. In the dark recesses of time and space, its terrifying creatures roam the cosmos, waging war on the Planet Earth. The desperate battle has just begun. As pilot of the R-1 fighter plane, it's your mission to crush these interstellar monsters using every sophisticated weapon at your disposal. Only your skill and reactions stand between brilliant victory — and the destruction of Mankind... At last, the arcade sensation bursts on to your home screen with several stages, features and a compelling, scorching feature — the ultimate in driving gameplay. R-Type™ ©1987 IREX M Corporation. Licensed to: ETECH, Greater.

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Open Fire!

SPECIAL



Yup, they all owe their existence to the shoot-'em-up; home computers, colour, graphics, sound, super-smooth scrolling, power-ups... everything. The shoot-'em-up is the Big Bad Alien Daddy of everything that sizzles in silicon.

Think we're exaggerating ah? Not a bit of it. It was the damage between Nolan Bushnell's Atari coin-op games and home computing in the UK that gave the Sinclair Spectrum its final boost to mass market status. Computers were suddenly driven out of the electronics hobbyist arena and into the mass market by hordes of popping, squeaking, zapping alien craft. Bow down - and worship.

Space invaders, naturally, is where the great trek starts. Devised by a group of Japanese psychiatrists (who should all have been given Nobel prizes), it took the world by storm and simultaneously gave birth to anti-computer mania, providing endless old grannies and youthful arty-farties with the ammunition to denude computer entertainment as 'mindless blasting' - something they still do today, though the target has been replaced by games that are anything but mindless.

For gamers however, it was the beginning of the great strategy debate. Was it best to count 21 ships before a satellite appeared? Should you go for horizontal 'creaming' as opposed to taking out the invaders in vertical blocks? How could you best use the fortress-est? And how do you deal with a 'ship on the run' - that

first end-of-level bossy?

Where'd you first see

parallax scrolling? Blast

into the past with Eugene

Lacey and the definitive

ACE History of the Shoot-

em-up...

SHOOT FROM THE LIP

OK, so you think you know everything about shoot-'em-ups. There are five quick questions scoldered throughout the article, but you just answer them all correctly. The answers are on page 88.

1. Which game starred in the first Atari MCS World Championship, and where was it held?

last, single 'Space Invader' and accelerated at break speed to wipe your puny ship! These were weighty matters much discussed in front of the flickering monitor at watering holes around the country.

THE GOLDEN AGE

Nothing challenged Space Invaders in the Spring and Summer of '79. While the punks were pogging to the Sex Pistols the gamers were content to peel off row after row of invaders in the never ending search for the highest possible score.

For the aliens, however, worse was to come.

Christmas that year brought us glorious technicolour opponents. The Galaxians were blue, red and yellow, and flaunted their superior intelligence by swirling and swooping around the screen in varying formations. They paid for it with their lives!

The action in Galaxian set the scene for the complex graphics backdrops of the future; the action took place against a jet black starry space scene, as opposed to the sombre darkness of Invaders. The improvements in sound, graphics, and gameplay thrust the cabinets into pubs, BR stations, and airports.

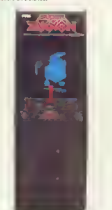
The success of Galaxian sent a clear message to the manufacturers - the punters wanted more shoot 'em ups, better graphics and colour. They would not have to wait long. November '79 saw the launch of Atari Asteroids - a return to black and white graphics, but this time your ship could be made to move in any direction at all over the screen. It was one of the great-

- 2 How much did Atari pay for the console rights for ET?
- 3 Trackballs were first introduced in 1980. Was the first trackball-controlled game at Missile Command or Centipede or Exorcist?



Moon patrol – June 1983
Williams' scrolling lunar shoot 'em up was the first game to feature parallax scrolling

When Steve Jobs was putting together the elite Atari exclusif team of computer designers who would work on developing the Apple Macintosh, he knew that long hours would be required to complete the task. There were two moral details that Jobs was looking for at the interview – you had to like animals on your piece and you had to be able to achieve a good score on Defender.



Super Zaxxon – 1985
Sega's beautiful 3D shoot 'em up was the catalyst for the quantum leap in graphical ability in the mid 1980's

Space ships were not the only themes gaining popularity in 1980. Stern launched *Buena Vista* in November: the game placed you in control of a robot that could walk around the screen in any direction he felt need. Blasting enemies as he travelled. Buena Vista may have been very basic graphically but it was still a first. The idea of controlling a character that could explore a terrain was also to be exploited to the full by games like *Commando* and, more recently, *Call of Duty* and *Midnight Resistance*.

est games from the Golden Age – it featured an effective 'floating effect' (inertia) that was later to be copied in stacks of Asteroids clones and in games like *Lunar Lander*, *Omega Race* and, years later, *Dios*.

May 1980 saw the next significant launch in the shape of Nichibutsu's *Moon Cresta*. This otherwise uninspiring rework of the old Galaxian game featured one major break through – it offered the first power up. By docking with another section of ship your fire power was increased. It was a fantastic mid-game reward, and increased the playability by giving the gamer more to aim for than simply building up points for downing aliens. This gameplay improvement was not missed by other gamers or gamers and *Moon Cresta* remains a pivotal game in the development of the shoot 'em up.

ENTER DEFENDER

1980 was a key year in the Golden Age for a much more important game – *Defender*. After Eugene Jarvis coded this game for the pinball manufacturer Williams the shoot 'em up would never be the same again. It was the first game that could be said to be truly 'cool' in a macho, esoteric way while at the same time commanding mass popularity.

What made *Defender* so popular was the challenge it presented – and what made it tough was its speed. You had a radar to show you the oncoming aliens but even with this aid you needed lightning reflexes to compete. The game also introduced the first rescue scenario in that you had to pick up the humans that were falling towards the planet floor as well as dealing with the aliens. The game was played on a horizontal plane – scrolling in both directions and with a 'wrap around' effect which meant that if your ship disappeared off the left it immediately reappeared on the left.

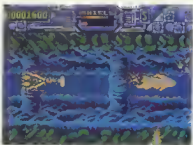
Defender was also very loud. The colourful streaks of laser fire spitting out of your ship had a screeching sound effect. It was the biggest, loudest, noisiest machine in the arcade and, if you couldn't play it, you were nobody. Its influence on later games was incalculable: the radar, rescue, 'wrap around' effects being borrowed in countless designs – from Williams' *Attack of the Mutant Camels* to Logotron's *Star Ray*.

Spring '81 saw the main competition in the shoot 'em up wars taking place on the West Coast of America with a flurry of new Atari designs battling it out with *Defender*. *Battalion* offered the first 3D vector graphics in a tank battle simulation and became an instant hit – few who played it will forget the first time their windshield shattered as they were blasted from behind.

INTO THE HOME

By now Atari had realised the potential of converting their coin-op games for home use on their VCS system. *Space Invaders*, *Berzerk*, *Defender*, *Galaxian* and

Star Trek – 1983
Sega's first licensed game was only a limited success



Star Trek by the Edge. Turns Teller's three screen monster piece into a one screen shoot 'em up for the ST and Amiga

Asteroids could all be played at home for about £30 a throw. It was the beginning of a link between the arcade and the home that would never be broken. It also made a fortune for Atari. By the end of 1983 they had sold ten million VCS's in America alone and several more million cartridges.

Apart from providing Atari with the funds to develop several more classic games, the VCS breathed one vital, original game to the library of classic shoot 'em ups. The game was *Star Raiders* and was developed by Fernando Herrera. This was the first 3D, deep space shoot 'em up. It was a precursor of *Elite* in that it had many of the same features, including a progressive rank scoring system and a galactic map. Above all, it gave us that swirling and swaying space battle action with the aliens emerging from the centre of the screen as tiny dots and growing larger as they approached your cockpit.

Meanwhile in the arcades those companies that didn't have a lucrative home system to peddle were not giving up the ghost. Centuri shipped *Phoenix* in March 1981. It looked a lot like *Galaxian* in its earlier levels but had one very important difference. After downing several squadrons of aliens you were confronted by a giant bird that you could only kill by lobbing sufficient missiles into its mouth. This was the first end-of-level nasty. Since *Phoenix* almost every shoot 'em up has had an end level nasty of some description.

BOMBS AWAY

Stern were still active, shipping the classic *Scramble* in April '81 and following it up with *Super Cobra* in July. Much not quite as big as *Defender*, *Scramble* was another highly significant game in the development of the shoot 'em up. It was the first game in which you had to have a high regard for flight controls – as well as a quick finger on the bomb and shoot buttons. Your ship had to be manoeuvred through an intricate level of narrow, undulating corridors and passages, blasting a path as you flew. This feature was copied on stacks of clones both in the arcade and on the popular home systems of the day. It is still a feature of the scrolling shoot 'em up – from *Gradius* to *R-Type* – flight control is as much a part of the challenge as blasting itself.

Midway clambered back into the limelight with *Galaga* at the beginning of 1982. *Galaga* represented another giant leap forward in the development of power rps. There were now several sections to be bolted on to your ship – including a unique power up feature with two ships joined together doubling the fire power at your finger tips.

GASP WORTHY GRAPHICS

In the four short years since *Space Invaders* the SEU had come a long way in game design. They were now far more challenging with much more to do than the simple left-right shoot of *Invaders*. But the graphics were still fairly basic. In those days you went into the

excuse to see what game challenges were to be had. It was not like today where you can stroll around and enjoy the graphical wonders on display without even having a go.

All this began to change in March '82. Sega launched *Zeoxon*. It was the first of the "gasp look at those graphics" games. Its pseudo 3D play area featured a gull-winged space ship flying over a cityscape - through fences and over walls blasting the robots that came towards you. Its gameplay was pretty limited - but it looked fantastic. The games that were to follow had to look good too, and it was in this period that graphics began to take precedence over the design of the game itself. There were one or two exceptions like *Torpedo* and *Gyruss*, but generally the witchword had become the prettier, the better.

Williams' *Moon Patrol* was a summer hit with its supero lunar landscapes and "panatix scrolling" - giving for the first time the authentic effect of the foreground moving faster than the land in the distance as the moon buggy rumbled along the planet surface. This has become so much a part of modern gameplay that it is now a dedicated graphics hardware feature on modern 16-bit consoles.

Metallic effects - later to be used to such great effect in games like *Urdum* - first surfaced in *Alien Xevous* in April '83 in what was the first of the modern style vertical shoot 'em ups. The landscape featured crevices with shadow, changing terrain of forest, desert and sea with metal domed alien structures for you to bomb. Power ups were to be gathered on the way with a giant installation to deal with at the end of each level.

Literally hundreds of games on a variety of systems have copied the basic design of *Xevous* - but as we can see *Xevous* itself was no more than a collection of the ideas that had gone before. It was not, in fact, a particularly good execution of the best of shoot 'em up game play features. That would come later in 1984 and 1985 in games like *Terra Cresta*, and *Star Flight*.

LICENSE TO KILL

By late '83 licensing was beginning to affect the shoot 'em up in a big way - both at home and in the arcade. In September of that year Atari shipped *Star Wars* - a vector graphics challenge in which the player had to destroy the Death Star by flying down a tunnel and delivering the killer missile.

This was also the first use of speech synthesis in a game (*Led the Force Be With You!*). Everyone thought that was the beginning of a boom in talking games. The reality is that the computers were not powerful enough to incorporate speech to any extent - a fact that is still largely true today, though games like *Star Runner* ("Hee-hee") still make effective use of short speech samples.



Robotron - 1984
This early game
also a grille
reach the mega.
All status of
Defender for
Eugene Jarvis
and Williams

GUNG HO!

1985 saw the introduction of the minicore shoot 'em up which has been so popular in recent months. One of the year was Capcom's *Commando* - an all directional scrolling Nam style shoot 'em up. Several game play elements were first: the idea of nuclear foot soldiers coming at you, commando necessitating constant swiveling through 360 degrees to avoid a bullet in the back was the main one.

The *Commando* could aim the top of the tank and armoured vehicles giving the player something to drive as well as manipulating the sector. But it was the graphic style of *Commando* that has been copied to create an impressive theatre of war with highly realistic tanks, armoured cars, jeeps, and weaponry. *Block Commando* shoot 'em ups have been led on a constant diet of ever more realistic military hardware.

The minicore shoot 'em up reached its zenith in Konami's *Grunt Borel*. *Grunt Borel* a great look was courtesy. The tanks, planes and submarines were so well drawn that you simply had to dash through the navy level just to see what the graphics would be like in the final boss scene. This was by no means the last time the graphical look was the main motivation in a game - *Grunt Borel* had it, as did *Salamander* - but *Grunt Borel* took it to the limit, and every shoot 'em up that came after it had to conform to the rule.

Developed by Gung Ho's 1985 Christmas, No. 1. Gung Ho's not become a leading classic either at home or in the arcade. The four player interface required to make it work properly is only available on the PC Engine, and the *Dungeon Explorer* game to play on this system is the best form of interaction of Gung Ho's. Game play wise Gung Ho's very basic - a simple matter of shooting things and grabbing treasure.

4. Who produced the first Wild West shoot 'em up, and what was it called?

5. Eugene Jarvis, programmer of *Defender* later produced a sequel. What was it called?



Intelligence, Atari
The sequel to the enormously successful *Defender*, and one of the few games to employ a trackball instead of a joystick.

EARLY ALIEN BIRDS

As a result of its success, *Space Invaders* was snapped up by the rights for Space Invaders for different territories. Initially brought to the US, the game and *Tetris* were the first in the US. However, it appeared it was no instant success. But it wasn't the only game you could have got money into in the Autumn of 1978.

Atari's *Defender*, *Asteroids*, and *Smash* also had already earned a place in the market, mostly before *Space Invaders* showed up. *Defender* was then right at the beginning with *Defender* and *Smash* in a pair of shoot 'em ups that were outlasting *Space Invaders* arrived on the scene that October.

Williams' *Invaders* had tried a game called *Space Wars* in July and had done reasonably well with it, but after *Space Invaders* arrived, these games may as well not have existed. The same about 'em up with its rapid delivery of hundreds of thousands and thousands of dollars worth of profits.



Operation Thunderbolt. *Warfare* has never been more graphic. *Defender* was a fortune by converting coin-op shoot 'em ups for use.

Sega were continuing to make things look pretty in 3D but still failing to innovate in the game design department with games like *Super Zeoxon*, *Star Trek*, and *Buck Rogers*. But sticking to the 3D knitting would later pay dividends later with games like *Space Harrier* and *Afterburner*.

HOME HIGHS

By the mid 1980's the home computer was rising high. Video game consoles had crashed and shoot 'em up action switched to the home computer as things also began to settle down on the coin-op front at the same time. Bug Byte had won the race to market the first game for the Spectrum by writing it in large part on the basis of the manual - without even seeing the computer. Naturally the game was a shoot 'em up, a rework of the ducky of them all entitled *Spectral Invaders*.

High spots in the eras of '84 and '85 were the extraordinarily pretty *Salamander* and its sequel *Nemesis* by Konami. These games were the forerunners of R Type. A return to horizontal scrolling with stacks of power ups and tremendous effort put into the graphics of the creatures. *Shakes*, *Snippets*, and *Robot-like* insects. Intents of graphical end game play quality the coin ops had made a quantum leap forward. It would take another two years before the home systems would start to catch up with the launch of the ST and the Amiga.

SATELITES

The use of power ups was becoming increasingly sophisticated. Capcom's 1942 was a World War II aerial shoot 'em up. Flying up the screen you had to attack the Japanese shipping whilst taking out the fighters and bombers. First the power ups gave you additional fire power - but pretty soon you had additional planes ('satellites') accompanying you, flying on each wing, and the most powerful smart bomb you could imagine that wiped everything in a deadly circle of flames. 1943 was to follow in '86 and *Flying Shark* in '87 but the military shoot 'em up had peaked - the hit of the year was *Gauntlet*.

Atari's *Gauntlet* was the first four player shoot 'em up with a Token style scenario. It featured a buy

IN THE PINK

THE ACE STOCKMARKET102
Which games are currently hitting the highspots? Find out in Britain's only games chart that tells you which titles are getting the **best reviews** not just which titles the barrow boys are forcing onto the shelves.

GAMES YOU'VE GOT TO HAVE.....92
The ACE updated guide to the games you just have to buy includes simulations, puzzles games, arcade action and more — everything for the discerning reader who wants to build up a collection of definitive titles.

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Men are born with brains, this is your chance to use them

THE ACE PRIZE CROSSWORD108
The industry's only computer-game dedicated crossword is

proving more popular each month since we managed to start printing the right grids! Grab a pencil and see if you can win a prize

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ASK MEL!

We now have a full-time Pink Pages reader's liaison officer: Melanie Costin, who will always be on hand to help you out with problems about Reader's Pages and/or Pink Pages mailorder difficulties. If you're a dealer and would like to place an advertisement in the pinks or arrange a voucher offer, contact Jerry Hall on 01 251 6222 Ext. 2465



THE GAMES YOU HAVE TO HAVE...

SOMETIMES YOU KNOW YOU'VE GOT TO FACE UP TO THE TRUTH. YOUR SOFTWARE COLLECTION IS GETTING YOU DOWN, YOUR DOG'S SICK, YOUR FRIENDS ARE CONVINCED IT WAS YOU THAT LOST THE WINNING POOLS COUPON, YOUR MOTHER HAS DECIDED YOU NEED TO CHANGE YOUR IMAGE, AND YOUR GIRLFRIEND (OR BOYFRIEND) HAS JUST BEEN EATEN BY A ROTTWEILER...THERE'S ONLY ONE THING FOR IT...GO OUT AND GET A NEW GAME. AND TO MAKE SURE YOU REALLY SEE THE BRIGHT SIDE, HERE'S A LIST OF GAMES YOU'VE JUST GOT TO ADD TO YOUR COLLECTION.

ARCADE STYLE

Including coin-op conversions. Games with a high fun factor and plenty of addictive action feature in this category.

ARKANOID

Imagine • Spectrum
£7.95c • C64 £8.95c
£12.95c • Amstrad
£8.95c £14.95c •
Atari XL/XE £9.95c •
Atari ST £14.95c •
MSX £8.95c • IBM PC
£19.95c

Conversion from Arkanoïd the coin-op, in its turn the best version of the classic Breakout. Simple in concept, the player controls a ball at the base of the screen, whizzing it left and right. The object is to keep a small ball in play, bouncing it off the ball to destroy formations of bricks in the top half of the screen. Eliminate all the bricks and move on to the next of 33 screens. Clever extra features contribute to the addictive nature. As a faithful coin-op conversion, Arkanoïd comes out top, but for a different slant on the same theme and some nifty music, by ASL's Impact, which also builds up the difficulty levels more gradually.

★ ACE CLASSIC

BOUNCE

Gremlin Graphics • Spectrum £7.95c • C64 £9.95c £12.95c • Amstrad £8.95c £13.95c

A great arcade bonfire, more and more addictive too. You guide a ball as it bounces from one platform to another, high above the vertically scrolling landscape. Land on marked squares and you can stay aloft longer or gain a mystery bonus. Fall in a gap or hit one of the game's many nasties however, and you'll lose a life. Bonus bouncing sections at the end of each level help vary the pace, and those tough gaps really keep you coming back for more. Bright, witty graphics, great music - and it's so playable.

★ ACE CLASSIC

BUBBLE BOBBLE

Firebird • Spectrum £7.95c • C64 £8.95c £12.95c • Amstrad £8.95c £14.95c • Atari ST £19.95c

Playability is the essence of this two-player coin-op conversion. You and a friend play brittle-blowing dinosaurs, travelling through 100 maze-and-platform screens, fighting off the brutes by encapsulating them in your bubbles to turn them into juicy fruit. More firepower and various bonuses await as you reach the more difficult later screens. Enormously good fun, it's a little on the cutesy side. Can also be played as one player against the computer.

★ ACE RATED 95

CONQUEROR

Superior • Archimedes £24.95c (Amiga and ST versions under development)

Drive around in your very own tank! Blast the enemy in close combat and plan your strategy for the campaign. This is a tricky game to get to grips with, but if you persevere you'll find you soon become mesmerised by the thing. If you get a 1Mb Archive though - forget it!

★ ACE RATED 93

ELIMINATOR

Hewson • Spectrum £7.95c £12.95c • C64 £9.95c £14.95c • Amstrad £9.95c £14.95c • Atari ST £19.95c • Amiga £19.95c

Graphically wonderful roadway blast-em-up by John Phillips, which will test your joystick inside out. It'll even have you driving on the ceiling. Though it's tough to get to grips with at first, the addition level is so great you'll keep coming back for more.

★ ACE RATED 90A

EXOLON

Hewson • Spectrum £7.95c • C64 £8.95c £12.95c • Amstrad £8.95c £14.95c

Graphically superb horizontally scrolling shoot-em-up in which you run, kick and jump your way along a planet's surface blasting away at alien creatures. A gun and a missile launcher are used to blast the foes, but if the enemies are still too tough then you can grab an exoskeleton for extra protection and firepower.

★ ACE CLASSIC

NEW ZEALAND STORY

Ocean • Spectrum £8.95c, C64 £9.95c, Amstrad £9.95c ST £19.99, Amiga £24.99

Although popped at the post in a head with Rainbow Islands, New Zealand Story is not a game to be ruled out. It is immense fun to play, provides lots of varied action across many levels. Definitely worth checking out.

★ ACE RATED 97S

OIOS

Mirrorsoft • Atari ST £19.95c

A magnificent Thrustish blast. The Oids are relying on you to save them, but the Bilocettes aren't going to let them go without throwing missiles, rockets and a number of other weapons at you. Included with the program is an edit facility that allows you to design your own planets - great stuff!

★ ACE RATED 99

PITSTOP 2

Epyx/MS Golf • Available only on Epyx Epyx compilation • C64 £9.95c £14.95c • IBM PC £29.95c

In compilation with Winter Games and Summer Games 2). Thrilling racing game where the screen is split into two and you can race the computer or a friend. Lots of different Grand Prix circuits, tyre blow-outs and of course the all important pitstops (nirvana) to give you hand crank and your brain a real racing treat.

★ ACE CLASSIC

POWER-OROME

Electronic Arts • Atari ST £24.95c

This superb arcade-style futuristic driving simulation will have you enthralled for months to come. It may not be terribly easy to get straight into but it's well worth persevering with. You'll be playing this for months.

★ ACE RATED 92S

PURPLE SATURDAY

Exxon • Atari ST £24.95c • Amiga £24.95

A terrific mix of games that delivers punch both audio and visual. The consistently good gameplay ensures you'll enjoy playing each sub-game time and again. It's a little tricky to get the hang of but master it and you'll be pleased you persevered.

★ ACE RATED 91Z

RAINBOW ISLANDS

Firebird • Spectrum £9.95c £14.95c • C64 £9.95c £14.95c • Amstrad £9.95c £14.95c, ST £24.99, Amiga £24.99

The sequel to Bubble Bobble is nothing short of fantastic. The graphics and sound are superb as is the gameplay. One of the best (and cutest) arcade conversions.

sions of the year that should not be missed
*** ACE RATED 93A**

RVF

Microstyle, ST £24 99,
 Amiga £29 99

RVF offers a near endless supply of fast paced bike action as you race your Honda RVF. Attention to detail is paid out all along the route with your rider going the bike a push start after a crash. An excellent mix of arcade and simulation.
*** ACE RATED E15**

SPIROTRON-IC

Cze International, Atari ST £19 95kd

Guide your spider-like character around the game area - collecting coloured panels in the correct order. The built-in construction set means you'll be knocking out your own levels till the cows come home.
*** ACE RATED 903**

SUMMER GAMES

Eyes/US Data, C64 £9 95 cs £14 95kd
 IBM PC £29 95kd

Eyes sporting simulations are of high quality but none have quite captured the playability and style of the original Summer Games and its immediate successor, Summer Games 2. One to six players can take part in high jump, gymnastics, spring board diving, clay pigeon shooting, swimming pole vault - and others - with lively large graphics and smooth animation throughout. Control of your athlete can be complex so practice is recommended.
*** ACE CLASSIC**

SUPER SPRINT

Electric Dreams, C64 £9 95kd £14 95kd
 Amstrad £9 95kd Spectrum £9 95cs Atari ST £19 95kd

One of the better run-on conversions currently available. With up to three players all competing at once the action is fast

and furious and it will take a finely-tuned car to complete some of the more tortuous circuits that appear later in the game
*** ACE RATED 907**

THRUST

Firebird, Spectrum £1 99cs C64 £1 99cs
 Amstrad £1 99cs

Terrifyingly sensitive controls and a large helping of real-life physics make this budget title an absolute must. Flying down through the caverns of an enemy-held planet, you have to pick up fuel and destroy hostile gun turrets without crashing into the tunnel walls. Tough enough as it is, but then you've got to make the return journey with a heavy load slung under your craft. Very mean, very addictive.
*** ACE CLASSIC**

URIQUIUM

Heaton, Spectrum £8 95cs C64 £9 95cs
 £12 95kd BBC £9 95cs £14 95kd

The piece de resistance of scrolling shoot-em-ups: blast the dreadnought and attacking ships while dodging around any large structures. Great metallic-looking dreadnoughts and the smoothest scrolling you'll ever see put this head and shoulders above the opposition. A game not to be missed especially now that C64 versions come packaged with the excellent Paradox.
*** ACE CLASSIC**

ZARCH / VIRUS

Superior Software, Archimedes £19 95kd
 Firebird 116 and 8-bit versions Amiga £19 95kd
 Atari ST £19 95kd
 Some 8-bit versions under development

A solid three dimensional shoot'em up with such graphic perfection and tirelessly addictive gameplay that it became an instant classic. Now the 16-bit versions have arrived and they're just as good as the 32-bit versions.
*** ACE RATED 981**

ADVENTURES

After a brief surge of RPG-related popularity, the traditional text-entry adventure is rapidly disappearing. But for those of you who savour the powers of the imagination, the verbal twist, and the thrill of encountering other characters, this game genre still has much to recommend it. Here are some of the all-time great computer fantasies...

BEYOND ZORK

Infocom/Activision, C64 £19 99kd PC £24 95kd
 Amiga £24 95kd Atari ST £24 95kd

Infocom's attempt to muscle in on the role-playing market is a great success. Locate the fabulous Coconut of Quendor in a game that combines the wit and ingenuity of one of the world's most original software companies with state-of-the-art parsing and gamesplay. Text-only but with an onscreen mapping facility.
*** ACE RATED 902**

CORRUPTION

Rainbird, Atari ST £24 95kd Amiga £24 95kd PC £24 95kd
 Spectrum £15 95kd C64 £17 95cs Amstrad £128 £19 95kd

This tale of insider dealings, infidelity and crooked business deals is unlikely to appeal to adventurers who prefer to wander through vast dungeon nests seeking treasure. But for those who are fed up with traditional adventuring, it's like a breath of fresh air. Superb graphics, great atmosphere and a nail-biting plot makes this a timeless game that grips from the start.
*** ACE RATED 920**

FISH

Magnetic Scrolls, PC £24 95kd Amiga £24 95kd

More gameplay than Corruption better game design than Jester and not as quirky as The Pawn. This is definitely

MS's best release since *Guard Of Theives*. Good stuff indeed.
*** ACE RATED**

GUILD OF THIEVES

Rainbird, C64 £13 95kd
 Spectrum £15 95kd
 Amstrad £128 £19 95kd
 Amiga £24 95cs Atari ST £24 95kd PC £24 95kd

One of Britain's newer adventure software houses - Magnetic Scrolls - managed to produce a traditional treasure hunt with superb graphics and some very tricky puzzles. Power 101 parser helps to create a convincing game world with humour and imagination.
*** ACE CLASSIC**

INGRID'S BACK

Level 9, Atari ST £19 95kd

A great follow-up to *Gnome Ranger*. Level 9 have really got to grips with the use of characters in their games and how to program them very effectively.
*** ACE RATED 920**

JEWELS OF DARKNESS

Rainbird, C64 £14 95cs
 Spectrum £28 £14 95cs
 Amstrad £14 95cs
 £19 95kd PC £19 95kd
 Amiga £19 95cs Atari ST £19 95kd

Level 9 have put together one of their classic releases, *Colossal Adventure: Dungeon Adventure and Adventure Quest* in

one bundle. The games have been updated with graphics and larger vocabularies and are as close to the original spirit of adventuring as you're likely to find.
*** ACE CLASSIC**

LURKING HORROR

Infocom/Mechanics, C64 £19 99kd ST £24 99kd Amiga £24 99kd PC £24 99kd

Infocom's tribute to H.P. Lovecraft and the horror fantasy genre sends you into a cold sweat as you discover something very nasty lurking beneath your college laboratory. Superb text-only game that dares you to play it after dark.
*** ACE CLASSIC**

TIME AND MAGIK

Mandarin, Spectrum £14 95cs £14 95kd
 C64 £14 95cs £14 95kd
 Amstrad £14 95cs

PUZZLES

If you're after a game that will provide you with a real challenge, without necessarily requiring large doses of strategic thinking, then it's a puzzle game you want.

BONE-CRUNCHER

Superior Software, C64 £9 95cs £11 95kd Amiga £14 95

At first sight this recent release may appear to be nothing more than a boulder-dash rip-off. However there are a number of innovative gameplay features which give Bonecruncher a feel all of its own. Highly recommended for those who prefer to solve problems rather than shoot them.
*** ACE RATED 946 - AMIGA**

BDULDERDASH

Phenix Leisure Corporation, Spectrum £2 99cs C64 £2 99cs Amstrad £2 99cs

A game that has everything - instant addition long-term challenges, be-

£14 95kd Atari ST £19 99kd Amiga £19 99kd PC £19 99kd

This compilation of the Level 9 games, *Lords Of Time*, *Red Moon* and *The Price Of Magic* have been re-invented with better parsing, bigger vocabularies and pictures added. Superb value if you don't already own them.
*** ACE RATED 916**

ZORK ZERO

Infocom Versions due out about now. Watch this space for price info. Highly enjoyable with a variety of challenges that make for instant addiction. A bit more character interaction would have made this a real handiwork, but even so it remains one of the best games of the year so far.
*** ACE RATED**

ONE- CRUNCHER

Stetic excitement as the clock ticks down and extremely tricky puzzles. You must collect jewels hidden in caverns, digging away earth and boulders to get far them. Boulders can drop and cause serious damage, while the jewels are often hidden by seemingly impenetrable walls. Complex but great fun. Boulderdash is a classic: you can't afford to miss in its budget incarnation.
*** ACE CLASSIC**

OEFLERKOR

Grenth/Vortex, C64 £9 95cs Spectrum £7 95cs ST £19 95kd

Optics are the order of the day here (not the speed of light) as the player moves to connect a laser beam to a receiver and at the same time destroy a

number of cells that are on screen as well. You'll need to make full use of the mirrors, line-of-sight conduits and pulsing and refracting blocks if you're to achieve your aim. Clear the first screen and you're only have 59 more to do. Fascinating stuff that's horribly addictive.

★ **ACE RATED 906 - ST**

NEBULUS

Hewlett • C64 £9.95cs
£14.99cs • Atan ST £14.99cs

Guide pogo to the top of eight towers using the spiral of platforms, lifts and ladders that form the route. It's a highly original game that strikes a line balance between frustration and addiction, added to which is the rotary scroll that makes it a good-looking, playable winner of a game.

★ **ACE RATED 943 - C64**

SENTINEL

Firebird • Spectrum £29.95cs • C64 £9.95cs
£14.95cs • Amstrad £9.95cs £14.95cs • Atan ST £19.95cs • Amiga £19.95cs

Bizarre and compelling strategy game played over the obsequious surface of a planet dominated by the Sentinel. Funds mentally you have to absorb energy while trying to stop the Sentinel from absorbing yours. A clean brain and fast trigger finger are both necessary in this very original and large 10 000 possible landscapes game.

★ **ACE RATED 963 - AMIGA**

SKULL DIGGER

Nexco • Atan ST £19.95

Bounddash clone that completely outdoes the original on this particular machine. Again (see Bounddash above) you're digging for diamonds in cavernous over a hundred different screens, with a time limit for each screen. Skulldigging scores on playability (easier screens to begin with and a choice of starting points) and it's entertaining two-player

option.

OPCON • **ACE RATED 919 - ST SPORE**
Buildco • C64 £1.99cs • Amstrad £1.99cs • Spectrum £1.99cs

The winning combination of strategy, tenacious blasting and great graphics make Spore a worthy full-priced release. What a bargain (even to be able to pick it up for £1.99).

★ **ACE RATED 919 - C64**

TETRIS

Mircrosoft • Spectrum £5.99cs • C64 £8.99cs
£12.99cs • Amstrad £8.99cs £12.99cs • Atan ST £19.95cs • Amiga £19.95cs • IBM PC £19.95cs

A fascinating geometrical oddity, this Russian puzzle turns the obscure mathematical topic of packing into a cult game. One a time, shapes fall downwards into a rectangular playing area. Left to their own devices they'll pile up until they reach the top of the screen. Your task is to guide them down and pack them tightly so that doesn't happen. Different versions have proved to be rather variable in their arcade aspects, but the brilliantly simple idea behind them means they're well worth a look whatever your machine.

★ **ACE RATED 939 - C64**

THINK!

Firebird • C64 £1.99cs • Amstrad £1.99cs • Spectrum £1.99cs

Originally released by Amstrad at full price, but now available for a fraction of that from Firebird. It's a horribly addictive game played on a 6x6 grid either one or two player - in which you attempt to connect four counters horizontally, vertically or diagonally.

★ **ACE CLASSIC**

XOR

Lorgnon • BBC £9.95cs
£12.85cs • Amstrad £9.95cs £14.95cs • Spectrum £7.95cs

Extremely tricky maze game involving the player

controlling two shields, and collecting masks through 15 mazes, which increase in complexity as you progress. Also in later stages, fish and chickens lie in wait, often blocking the masks and just waiting to fall on you and

bring your quest to a premature end. Later still, things hot up as bombs, transporters and dolls conspire against you. Smooth scrolling, simple graphics, this one requires planning to complete successfully.

SPECIALS

Original works that are simply unclassifiable feature in this section.

ATF

Digital Integration • C64 £8.95cs £12.95cs • Amstrad £8.95cs £12.95cs • Spectrum £8.95cs £13.95cs

Excellent combat/flight simulator that's a bit of a change for Digital Integration, the simulation specialist. The emphasis is on solid action, the result being a sure-fire hit.

★ **ACE RATED 968 - SPECTRUM**

DARK SIDE

Incentive • C64 £9.95cs
£14.95cs • Amstrad £9.95cs £14.95cs • Spectrum £9.95cs £14.95cs

The second game using the Freespace programming system, which sets more of an arcade challenge. The 3-D graphics are decent superb as are the tasks and puzzles.

★ **ACE RATED 915 - AMSTRAD**

ELITE

Firebird • C64 £14.95cs
£17.95cs • Amstrad £12.95cs £14.95cs • Spectrum £14.95cs • BBC £13.95cs £14.95cs (available from Superior software)

Still the best space trading game, Elite set a standard for other companies to follow. One of the first space games to use vector graphics. It's a shooting and trading effort set across several galaxies, with plenty of variety to the game play. You can trade legal goods (in relatively safe systems), or run the galaxy of pirates in the galaxies, danger spots with your hold full of contraband. Either way

there's a nice line in zero-G dogfighting, and as big a task as you'll find anywhere.

★ **ACE CLASSIC**

INCREDIBLE SHRINKING SPHERE

Electric Dreams • C64 £8.95cs £14.95cs • Amstrad £9.95cs £14.95cs • Spectrum £9.95cs £14.95cs • Atan ST £19.95cs • Amiga £24.95cs

A manic maze world where mass, size and inertia combine to provide wicked gameplay. Tricky puzzles and endless nasty obstacles will have you rolling around in delight.

★ **ACE RATED 923 - C64**

M1 TANK PLATODN

Microprose • PC £39.95cs

This is a welcome break from flight sims that boasts enough detail to keep even the most compulsive tankpacer happy and at the same time has a breadth of challenge and combat scenarios that should satisfy the most ardent gamer. A winner.

★ **ACE RATED 926**

MAGNETRON

Firebird • C64 £8.95cs
£12.95cs • Spectrum £8.95cs £12.95cs

Puzzles and action Steve Turner style. Save the world by dismantling eight satellites. Steal parts from enemy drovers to upgrade your own droid and hopefully make your job a little easier. The ideal game for Quazatron fans looking for a similar new challenge.

★ **ACE RATED 904 - SPECTRUM**

QUEDEX

Thalamus • C64 £9.95cs
£14.95cs

In this impressively challenging game you must steer a metallic ball through ten different screens of mazes, bonus arcs and obstacles, all within a set time limit. This simple game concept has a host of added features to make it particularly pleasing. You can carry over unused time to the next screen, for example, and tackle the different screens or planes in any order you wish. Excellent graphics and utterly absorbing play.

★ **ACE RATED 934 - C64**

SPINDIZZY

Electric Dreams • C64 £9.95cs £14.95cs • Spectrum £9.95cs • Amstrad £9.95cs £14.95cs

Disk

Tremendous stuff; steer your spinning top over tough obstacles and collect jewels, against a handish time limit. The game landscape is a vast system of catwalks, ramps, towers and trapdoor lures surrounded by lethal drops, and NO safety rails. Floor switches activate lifts and bridge traps, but tripping them in the right order can be harder than it looks. A few bad guys and a lot of nice touches, but the explorations the thing.

★ **ACE CLASSIC**

STARGLIDER II

Reinbird • Atan ST £24.95cs • Amiga £24.95cs

One of the finest examples of a game using vector graphics to their full advantage. Gets the solid 3D treatment and comes out looking every bit a winner. You've got a large tank to complete and there's plenty of Egon's to destroy, making this combination of blasting and exploration that stands head above the competition.

★ **ACE RATED 927 - ST**

STAR TREK V

Mindscope • PC £34.95cs
• MAC £34.95cs

This is easily the best intro prelude of Star Trek yet. The gameplay provides absorbing and challenging hours of fun. A must for Trekkers and an entertaining space strategy/simula for for everyone else.

★ **ACE RATED 930**

TAU CETI/ACADEMY

CRL • C64 £9.95cs
£14.95cs • Amstrad £9.95cs £14.95cs • Spectrum £9.95cs • Atan ST £19.95cs • Amiga £19.95cs

Flight simulator/shoot 'em up and its sequel which are both incredibly smooth and well put together. The attention to detail is impeccable as you set off on hair-raising missions as a space cadet. In Academy you get to design your own space skimmer craft as well.

★ **ACE CLASSIC**

TOTAL ECLIPSE

Incentive • C64 £9.95cs
£12.95cs • Amstrad £9.95cs £12.95cs • Spectrum £9.95cs £14.95cs

The third game using the Freespace system is a bit of a departure from the first two, but it's still an incredible game. In total eclipse you're battling against time back in the 1930s trying to prevent the moon exploding. For arcade adventurers who love puzzles, the Freespace system is a god send.

★ **ACE RATED 907 - AMSTRAD**

WIZBALL

Ocean • C64 £8.95cs
£14.95cs • Amstrad £8.95cs £12.95cs • Spectrum £8.95cs £14.95cs

Become Wizball and conquer the colour creations which are often on elemental, the spectrum and rendering the landscape grey and drab. One of the most playable games around despite the simple scenario.

ACE Classic

RPG

Role-playing games have exerted an enormous influence on modern game-styles. They combine the atmosphere of text adventures with the action of arcade games and the brain exercise of strategy – but their graphical presentation tends to be weaker than other game genres. Gameplay centres around developing characters by raising their experience and skill levels in conflict with other, computer-controlled nasties. All that – and a quest too...

THE BARD'S TALE II

Electronic Arts • C64
£16.95, Amiga £24.95

The highly successful predecessor to Bard's Tale II, BT II has the advantage of being slightly easier to advance. The Amiga version features some very nice sampled music charts when you enter a temple and excellently coloured graphics. And of course, you can update your favourite characters, their attributes and equipment for use in BT II.
★ ACE RATED 920

THE BARD'S TALE III

Electronic Arts • C64
£14.95

The latest Bard's Tale game offers a number of refinements over its predecessors (all of which are still well worth taking a good look at). First, the graphics are better animated. Second, there are ranged combat routines which take careful account of the distance between you and your opponents. Finally, the game's large and represents excellent value for money.
★ ACE RATED 920

BATTLETECH

Infocom PC £29.95, ST

Battletech features some incredible cartoon sequences, arcade style action, role play and strategy in short a com-

plete, full game. A brilliant RPG purchase even though it missed out on an Ace rating.
★ ACE RATED 801

DUNGEON MASTER

Electronic Arts • C64
£14.95

Quoted as being a 'milestone in Advanced Computer Entertainment' Dungeon Master offers 14 levels, loads of spells, atmospheric graphics and sound. All going to make Dungeon Master one of the best role-playing adventures to have appeared on any machine.
★ ACE RATED 948

POOL OF RADIANCE

US GOLD/SSI
★ C64 £14.95

SSI were very brave to attempt to capture the complex concept of the AD&D system on a computer, but they managed superbly. An RPG-influenced game that will appeal to not only AD&D fans but to anyone looking for an entertaining game that will keep them playing for months.
★ ACE RATED 821

ULTIMA V

Chin Systems/Microprose
★ C64 £24.95 • PC
£29.95 • ST/Amiga to be announced

Astonishing level of detail in this role-playing in-

fantasy epic. Travel round Britannia brushing the opposition and learning the magical, tactical, and geographical secrets that will enable you to defeat the forces of evil far underground. Superb ramp

great lasting interest, and tough challenges galore.
★ ACE RATED 928

WASTELAND

Electronic Arts • C64
£14.95

myriad options which enable you to play, watch, work out chess problems etc against a live computer opponent.
★ ACE CLASSIC

COLOSSUS MAH JONG

CDS • C64 £9.95
£14.95 • Amstrad
£9.95 • £14.95

Rummy-like oriental game of strategy and chance. A tutor program and a short manual make this an easy to use and highly entertaining piece of software for veterans and novices alike.
★ ACE RATED 937 - C64

INFOFRAMES' BRIDGE

Infotrames • Amstrad
£12.95 • £15.95 • MSX £12.95

Fed up with mindless blasting? Want a game that offers you an opponent who's worthy of your skills? Then this is your section...

CHESS MASTER 2000

Electronic Arts • C64
£9.95 • £14.95 • Amiga
£24.95 • IBM PC
£24.95

Strongest chess game on the Amiga, with excellent graphics. 2D or 3D viewpoint, 12 levels of difficulty and all the playing options you could wish for. Plus some fairly nifty Speech Synthesis.
★ ACE CLASSIC

COLOSSUS CHESS 4

CDS • C64 £9.95
£14.95 • Amstrad
£9.95 • £14.95 • Spectrum £9.95

Best bet for 8-bit machine owners, with a choice of 2D or 3D view, unimpaired levels of difficulty, and a

Change around irradiated USA whopping student bunnies and biker scum in this role-playing epic. The atmosphere may not be as good as the Bard's Tale series of games, but the extra dimension of

strategy leaves the cut, slash and spell scenario of the BT series way behind.
★ ACE RATED 927

Graphically the best of all contract bridge simulations, with large playing cards depicted against a suitably green baize background. Plays a good game for a computer, which after all is a bit short in the management and that department, and features a wide range of options and bidding conventions which you can toggle according to your style.
★ ACE CLASSIC

POWERPLAY

Arcana • C64 £8.95
£14.95 • Amstrad
£8.95 • £14.95 • Amiga
£19.95 • £24.95

If you want to try out your general knowledge, we reckon you'd be better off with this original and challenging combination of

strategy game and quiz than with the admittedly monster selling Trivial Pursuits. Powerplay is graphically very pretty in its setting on Mount Olympus, Home of the Gods.
★ ACE RATED 933 - Amiga

SCRABBLE

Lecture Games • C64
£12.95 • £14.95 • Amstrad £9.95 • £14.95
• IBM PC £24.95

The hugely popular word game translated very successfully onto the micro. Fast, excellent display, and a surprisingly large vocabulary level if it does include some strange-looking words on some occasions. Good enough to give even strong human opponents a tough game at the higher levels.
★ ACE CLASSIC

WAR GAMES

Fancy yourself as a master of grand strategy, marshalling hordes of troops and sending them off to do battle on your behalf? Look no further than the ACE war games section...

ARNHEM

CDS Spectrum £8.95, Amstrad £9.95, C64 £9.95

One of the oldest quality wargames featured in the section, Arnhem was easily the best in the field. It has all the expected atmosphere, live separate scenarios and one of the toughest computer opponents you could ever want to meet. A thoroughly absorbing wargame which can be classed as one of the old masters.
★ ACE RATED 910

CONFLICT EUROPE

Microsoft, ST 24.99, Amiga £24.99, PC TBA

The 16 bit progression of Theatre Europe. Lots of extra graphical and sound effects. The computer controlled intelligence was marginally sophisticated but still enough to give a challenging game. The correct balance between strategy and extension throughout. Great for beginners and intermediate players.
★ ACE RATED 982

THEATRE EUROPE

PSS, Spectrum £9.95, C64 £9.95, £14.95, Amstrad £9.95, £14.95

The perfect game for 8 bit owners who go green with envy when they look at Conflict Europe. Theatre Europe is the forerunner to the excellent 16 bit game. The graphics and overall play are not as sophisticated, but on the whole it still is one heck of a game.
★ ACE RATED 915

UMS

Rainbird, ST £24.95, PC £24.95, Macintosh £34.95, Amiga £24.95

Probably the greatest war game to date. UMS unique 3D systems enables the creation of almost any battle in history. As well as a very sophisticated computer opponent it has on top of this, we add on scenarios and a very neat construction kit to keep you going for ever longer. An essential purchase.
★ ACE RATED 907

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FLIGHT SIMULATIONS

How about flying the latest US Stealth Fighter on a mission over Siberia? Or perhaps a quick flight over Hawaii would be more relaxing? Computer flight simulations can fulfill any flight of fancy

BATTLE-HAWKS 1942

Lucasfilm Games/US Gold
ST \$24 95dk • Amiga
£24 95dk • PC £24 95dk

A WWII NAVAL AIR
COMBAT SIMULATOR
COVERING THE FOUR
MOST IMPORTANT BAT-
TLES OF THE 1942
PACIFIC WAR FOR
KNUCKLEWHITENING
ACTION THIS ONE HAS
EVERYTHING - THE
SENSE OF BEING
THERE IS TREMENDOUS
THRILLING AND SUR-
PRISINGLY ADDICTIVE
STUFF

★ ACE RATED
928

BOMBER

Advision • Spectrum
£14 99cs £19 99dk •
C64 £14 99cs £19 99dk
• Amstrad £14 99cs
£19 99dk • ST £24 99dk
• Amiga £24 99dk • PC
£34 99dk

Vector Graphics has spent a
long time on this one -
and it certainly shows. The
game gets the balance
just right between con-
vincing simulation and enter-
taining game. Highly rec-
ommended

★ ACE RATED
925

CHUCK YEAGER'S ADVANCED FLIGHT TRAINER

Electronic Arts • Spec-
trum • C64 • CPC • ST
• Amiga • PC £24 95dk

Fly a multitude of aircraft
from an early biplane to the
Space Shuttle. It's
entertainingly different
from your standard flight
sim and there's so much in
this game that it will take
many hours of instructive
fun to experience and
master all the available
options.

★ ACE RATED
912

F-16 COMBAT PILOT

Digital Integration • ST
£24 95dk • Amiga
£24 95dk • PC £24 95dk

This looks like person
years to develop, and you
can feel that quality of
work when playing it - it's
one of the most realistic
flight sims on the market.
If you are a connoisseur of
flight simulators then this is
an essential addition to
your collection

★ ACE RATED
970

FALCON

Spectrum Hobby/Amor
soft • ST £24 95dk •
Amiga £24 95dk • PC
£24 95dk • MAC
£49 95dk

If you really want the ter-
ror, exhilaration and sheer
everything happens all

once confusion of combat
flying, this game delivers.
Make no mistake, this
game is the real thing. An
essential purchase for
last-let-lans

★ ACE RATED
945

FLIGHT SIMULATOR II

Sublogic • C64
£39 95dk • ST £49 95dk
• Amiga £49 95dk • PC
£49 95dk • MAC
£49 95dk

The flight sim that put the
genre on to the map. Thor-
oughly realistic flight sim
of a domestic Cessna
plane, which is even used
by flight schools to train
would-be pilots. Can be

enhanced by a variety of
Scenery Disks

★ ACE CLASSIC

INTERCEPTOR

Electronic Arts • Amiga
£24 95dk

A low level flight sim with a
b-level of fun. Pursuits may
dispute the label simula-
tor - it certainly wouldn't
train you to fly a real life
Hornet - but this program
combines realism and
gameplay far too well for
that to matter. If you want
snail-of-the-paths air com-
bat action, maraudous
graphics and NO six
month training period, look
no further!

★ ACE RATED
934

RACING SIMULATIONS

In You can't have too much of a good thing, even if the excitement is liable to give the old ticker a good going over. Racing
sims have really come into their own over the past couple of years - and this is where you find out how to get the best of
motor racing action - all from the comfort of the armchair in front of your computer...

LOMBARD RAC RALLY

Mandarin • ST • Amiga
• PC

Race through many types
of terrain, such as moun-
tain or forest, and through
many types of weather
conditions, such as fog or
night. The game has a
nice atmosphere, and
though the variety of
gameplay may be a little
low, it's still a game you'd
be playing for a good
while

FERRARI FORMULA ONE

Electronic Arts • ST
£24 99dk • Amiga
£24 99dk • PC £24 99dk

A bit old this one, but still
a game that was way

ahead of its time to start
with. Take the wheel of a
Formula One Ferrari racer
on some of the most
famous racecourses in the
world. A true thorough
bred

R.V.F.

Microstyle • ST £24 99dk
• Amiga £24 99dk

The champion is the Best
Sprite Based Racing Game
stakes, and a superb simu-
lation, this one puts you
into the world of profes-
sional bike racing on more
than the Honda
RVF750. Brilliant graphics,
brilliant sound, brilliant
game

STUNT CAR RACER

Microstyle • Spectrum

£9 99cs £14 99dk • C64
£9 99cs £14 99dk • ST
£24 99dk • Amiga
£24 99dk • PC £24 99dk

This places itself in the
annals of computer history
as being one of the most
amazing spectacles to
watch, let alone play. The
game is first-person per-
spective, with the outside
world made up of really
fast smooth lined vectors
and the impression of real-
ism is unbelievable. An
amazing experience, and a
clear winner. Where can
things go from here?

SUPER HANG ON

Electronic Dreams • Spec-
trum £9 99cs • C64
£9 99cs £14 99dk •
Amstrad £9 99cs
£14 99dk • ST £24 99dk

• Amiga £24 99dk

Not so much a simulation
as a perfect arcade con-
version of a brilliant bike
racing Sega coin-op.
Great game, excellent con-
version

THE DUEL - TEST DRIVE II

Accolade • C64 • ST •
Amiga • PC • MAC

Accolade tried to right all
the Test Drive wrongs with
this sequel, and to an
extent they succeeded.
There's nothing serious
about the game. It's just a
lot of fun. It doesn't claim
to be technically or visually
accurate, but why should
it?

THE BOOKS YOU HAVE TO HAVE!

- If you ever find it possible to drag yourself away
from your computer and watch the TV instead you
might have seen a programme on BBC last month
about computer games - those people who just
can't get enough of their mimes and are quite
happy to burn the midnight oil just to be with them.
The programme suggested that such activities might
be unhealthy (could it be true?). Never being a
magazine to promote ill health ACE has decided to
bring a sensible, adult activity, namely READING.
So here goes with the books you have to have
1. Doctor Seuss's ABC - A very colourful read,
and just the right place to start if you've never
done any before
 2. Fox in Sox - A tongue twisting Dr Seuss book
for more advanced readers.
 3. Douglas and the Blue Cat - Probably the best
book ever written (well, with pictures anyway)
 4. Any Pooh Book - Any hours you spend with the
bear of the title brain are hours well spent. All the
philosophy you need for survival is contained
here.
 5. The Tao of Pooh - All that philosophy explained

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serious
gamer!

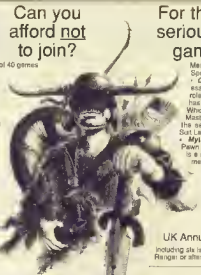
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Bones, or alternative and membership of Social Science.

16 Bit Software

AMIGA	ST	IBM	MS-DOS/PC/AT/XT/286/386/486/586/686/786/886/986/1086/1186/1286/1386/1486/1586/1686/1786/1886/1986/2086/2186/2286/2386/2486/2586/2686/2786/2886/2986/3086/3186/3286/3386/3486/3586/3686/3786/3886/3986/4086/4186/4286/4386/4486/4586/4686/4786/4886/4986/5086/5186/5286/5386/5486/5586/5686/5786/5886/5986/6086/6186/6286/6386/6486/6586/6686/6786/6886/6986/7086/7186/7286/7386/7486/7586/7686/7786/7886/7986/8086/8186/8286/8386/8486/8586/8686/8786/8886/8986/9086/9186/9286/9386/9486/9586/9686/9786/9886/9986/10086/10186/10286/10386/10486/10586/10686/10786/10886/10986/11086/11186/11286/11386/11486/11586/11686/11786/11886/11986/12086/12186/12286/12386/12486/12586/12686/12786/12886/12986/13086/13186/13286/13386/13486/13586/13686/13786/13886/13986/14086/14186/14286/14386/14486/14586/14686/14786/14886/14986/15086/15186/15286/15386/15486/15586/15686/15786/15886/15986/16086/16186/16286/16386/16486/16586/16686/16786/16886/16986/17086/17186/17286/17386/17486/17586/17686/17786/17886/17986/18086/18186/18286/18386/18486/18586/18686/18786/18886/18986/19086/19186/19286/19386/19486/19586/19686/19786/19886/19986/20086/20186/20286/20386/20486/20586/20686/20786/20886/20986/21086/21186/21286/21386/21486/21586/21686/21786/21886/21986/22086/22186/22286/22386/22486/22586/22686/22786/22886/22986/23086/23186/23286/23386/23486/23586/23686/23786/23886/23986/24086/24186/24286/24386/24486/24586/24686/24786/24886/24986/25086/25186/25286/25386/25486/25586/25686/25786/25886/25986/26086/26186/26286/26386/26486/26586/26686/26786/26886/26986/27086/27186/27286/27386/27486/27586/27686/27786/27886/27986/28086/28186/28286/28386/28486/28586/28686/28786/28886/28986/29086/29186/29286/29386/29486/29586/29686/29786/29886/29986/30086/30186/30286/30386/30486/30586/30686/30786/30886/30986/31086/31186/31286/31386/31486/31586/31686/31786/31886/31986/32086/32186/32286/32386/32486/32586/32686/32786/32886/32986/33086/33186/33286/33386/33486/33586/33686/33786/33886/33986/34086/34186/34286/34386/34486/34586/34686/34786/34886/34986/35086/35186/35286/35386/35486/35586/35686/35786/35886/35986/36086/36186/36286/36386/36486/36586/36686/36786/36886/36986/37086/37186/37286/37386/37486/37586/37686/37786/37886/37986/38086/38186/38286/38386/38486/38586/38686/38786/38886/38986/39086/39186/39286/39386/39486/39586/39686/39786/39886/39986/40086/40186/40286/40386/40486/40586/40686/40786/40886/40986/41086/41186/41286/41386/41486/41586/41686/41786/41886/41986/42086/42186/42286/42386/42486/42586/42686/42786/42886/42986/43086/43186/43286/43386/43486/43586/43686/43786/43886/43986/44086/44186/44286/44386/44486/44586/44686/44786/44886/44986/45086/45186/45286/45386/45486/45586/45686/45786/45886/45986/46086/46186/46286/46386/46486/46586/46686/46786/46886/46986/47086/47186/47286/47386/47486/47586/47686/47786/47886/47986/48086/48186/48286/48386/48486/48586/48686/48786/48886/48986/49086/49186/49286/49386/49486/49586/49686/49786/49886/49986/50086/50186/50286/50386/50486/50586/50686/50786/50886/50986/51086/51186/51286/51386/51486/51586/51686/51786/51886/51986/52086/52186/52286/52386/52486/52586/52686/52786/52886/52986/53086/53186/53286/53386/53486/53586/53686/53786/53886/53986/54086/54186/54286/54386/54486/54586/54686/54786/54886/54986/55086/55186/55286/55386/55486/55586/55686/55786/55886/55986/56086/56186/56286/56386/56486/56586/56686/56786/56886/56986/57086/57186/57286/57386/57486/57586/57686/57786/57886/57986/58086/58186/58286/58386/58486/58586/58686/58786/58886/58986/59086/59186/59286/59386/59486/59586/59686/59786/59886/59986/60086/60186/60286/60386/60486/60586/60686/60786/60886/60986/61086/61186/61286/61386/61486/61586/61686/61786/61886/61986/62086/62186/62286/62386/62486/62586/62686/62786/62886/62986/63086/63186/63286/63386/63486/63586/63686/63786/63886/63986/64086/64186/64286/64386/64486/64586/64686/64786/64886/64986/65086/65186/65286/65386/65486/65586/65686/65786/65886/65986/66086/66186/66286/66386/66486/66586/66686/66786/66886/66986/67086/67186/67286/67386/67486/67586/67686/67786/67886/67986/68086/68186/68286/68386/68486/68586/68686/68786/68886/68986/69086/69186/69286/69386/6948
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ACE DIARY

ALL THOSE IMPORTANT DATES, RELEASES, AND BIRTHDAYS FOR FEBRUARY/MARCH.
DON'T FORGET: IF YOU'VE GOT AN EVENT YOU WANT TO SEE PUBLICISED IN THE DIARY, LET US KNOW!

FEBRUARY

WEEK ONE

10 SATURDAY

All Formats Computer Fair, New Horticultural Hall, London SW1 (bergans and cut-price software)

11 SUNDAY

12 MONDAY

13 TUESDAY

Chuck Yeager, first man to fly faster than the speed of sound, born this day in 1923. Licensed his name to Electronic Arts' *Chuck Yeager Advanced Flight Trainer* - a supersonic flight sim

14 WEDNESDAY

St Valentine's Day. The original St Valentine lived in the fourth century and there is nothing in his life history, or in the legends surrounding him to suggest why he might have inspired the practice of sending Valentines, which are more likely to have originated as an ancient pagan practice

15 THURSDAY

Anniversary of the introduction of decimal currency, in 1971

16 FRIDAY

Birthday of John McEnroe, 1959.

17 SATURDAY

Birthday of Barry Humphries, or should that be Dame Edna Everage, 1934

WEEK'S RELEASES AT A GLANCE

Firebird: P47 - Thunderbolt (Amiga, ST) Second World War air combat action, from the Jaleco coin-op.

Star Wars Trilogy (PC compatibles) Compilation featuring the three Star Wars arcade games

Mindscape: Gin & Cribbage (Amiga)

Reinbird: Midwinter (PC compatibles) Mike Singleton's latest, a tale of strategy and confrontation in the new Ice Age

18 SUNDAY

National Day, Nepal independence Day, Gambia Birthday of Bobby Robson, 1933

19 MONDAY

President's Day, USA

20 TUESDAY

21 WEDNESDAY

Feast Day of St Peter Damian, renowned for his severity. Known for representing one bishop because he was indulging in that most frivolous of activities - chess

22 THURSDAY

23 FRIDAY

24 SATURDAY

WEEK'S RELEASES AT A GLANCE

Impressions: Renaissance (Amiga, ST)

Rainbow: Tower of Babel (Amiga) ACE rated at 930 last month, arcade puzzle game by Pete "Tau Geti" Cooke

Weird Dreams (C64 tape and disk) Explore your nightmares in this arcade adventure

Domeik: Hard Drivin' (Archimedes) 3D racer featuring speed and stunt tracks (including the infamous loop the loop) translated onto the super-fast snipe smooth Arc.

25 SUNDAY

National Day, Kuwait, Feast Day of St Elthelbert of Kent, the king who built the first St Paul's cathedral in London.

26 MONDAY

27 TUESDAY

Shrove Tuesday. Pancake time, everyone

28 WEDNESDAY

Ash Wednesday - beginning of Lent, Birthday of Barry McGuigan, one time world flyweight boxing champion and of Barry McGuigan's *Boxing* (Activision) fame, 1961

MARCH

1 THURSDAY

St David's Day

2 FRIDAY

3 SATURDAY

Anniversary of the Throne (National Day) Morocco

WEEK'S RELEASES AT A GLANCE

Cinemaware: Amiga (1Mb only), *Ant Heads* (A Game From the Desert date disk) Sequel to the acclaimed B-movie inspired Cinemaware title. The ants are back in all their platinum-doried glory. Requires the original disk and a 1Mb Amiga to operate

Mindscape: TV Sports Basketball Basketball action simulation

Firebird: P47 - Thunderbolt (Spectrum, C64, CPC) Second World War air combat action, from the Jaleco coin-op

4 SUNDAY

Birthday of Kenny Dalglish, 1951

5 MONDAY

6 TUESDAY

Independence Day, Ghana, Daily Mail Ideal Home Exhibition opens (continues until April 1)

7 WEDNESDAY

8 THURSDAY

9 FRIDAY

10 SATURDAY

WEEK'S RELEASES AT A GLANCE

Electronic Arts: Powerdrome (PC compatible) Futuristic racing game set in an outer galaxy

Domeik: Hard Drivin' Extra Tracks (Amiga) More stunts, more twists and turns in this Hard Drivin' accessory disk

Reinbird: Weird Dreams (PC) Arcade-adventure in the realms of the subconscious.

Tower of Babel (ST) Hard to define puzzle game, with an ACE rating of 930.

Midwinter (ST) Mike Singleton's latest, a tale of strategy and confrontation in the new Ice Age

GET YOURSELF IN THE DIARY!

Whether you're a software house with a launch or a charity with a lunch, tell us now and we'll put you in the ACE diary. Write to the ACE Diary, 30-32 Farringdon Lane, London, EC1R 3AU

First deadline: the second Thursday in every month for the issue on the shelves in the following month

PREMIER MAIL ORDER

8 BIT TITLE

6 BIT TITLES

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Reinbird	73.83	-7.73	90.52	2.25
Griffin	72.22	-3.01	96	8.64
Mindscape	71.9	-8.51	89.42	8.32
Domark	71.44	-0.22	99.68	-0.14
SSI/US Gold	71.33	+7.5	111.75	-0.25
Addictive	71.2	n/a	100*	-0.38
Ance	70.67	-2.12	97.09	-0.81
SubLogic	70	n/a	100*	-1.58
Accolade	69.21	-6.84	96.67	-2.37
Epyr/US Gold	69	n/a	84.81	-2.58
Code Masters	68.13	n/a	100*	-3.45
Mastartronic	67.3	n/a	106.83	-4.28
Infogrames	67.24	-6.73	90.8	-4.34
Pygmalion	67	-4.33	83.83	-4.58
Grand Slam	66.75	n/a	118.83	-4.83
Readysoft	66.75	n/a	100*	-4.83
Wicked	65.5	n/a	103.58	-5.06
Elite	65.33	-4.44	93.84	-5.25
Digital	65	n/a	100*	-5.58
Lakeview Genies	65	n/a	100*	-5.58
Smash 18	65	-15	81.25	-5.58
Hexxen	64.84	-4.96	92.86	-7.04
16-Bititz	64.33	+26.33	168.28	-7.25
Edge	64.18	-2.56	96.16	-7.39
Lagatron	63.75	-5.45	82.12	7.83
Tynesoft	62.31	n/a	100*	-9.27

Players Premier	61.54	+18.87	147.86	-10.04
Players	61	n/a	100*	-10.58
Titus	60.06	n/a	100*	-11.52
Magic Bytes	60	n/a	100*	-11.58
ARC	58.5	n/a	100*	-13.08
Kixx	58	+1	101.75	-13.58
Encore	58.9	+8.58	120.27	-14.68
Starbyte	58.67	n/a	100*	-14.94
CDS	55.5	-7.87	87.44	-16.08
Alternative	55.06	+7.06	114.71	-18.52
Accl Screenhole	45.75	n/a	54.96	-25.83
Artistic	n/a	47.41	n/a	
Wellhead	n/a	80	n/a	
Style Back	n/a	74.37	n/a	
Digital Int'l	n/a	55.6	n/a	
Dinamix	n/a	118.72	n/a	
Genialist	n/a	81.87	n/a	
Image Works	n/a	88.53	n/a	
Impressions	n/a	78.78	n/a	
Infocom	n/a	65.21	n/a	
Level 9	n/a	83.81	n/a	
MicroIllusions	n/a	87.41	n/a	
Novagen	n/a	80	n/a	
PSS	n/a	48.7	n/a	
RAD	n/a	101.82	n/a	
Relite	n/a	106.5	n/a	

Shades (G'Slam)	n/a	80	n/a
System 3	n/a	92.8	n/a
Thalonus	n/a	77.05	n/a

Pro-Tennis from Ubisoft has done well in ACE this month. How will it affect the charts next month? Watch out for Micro-press's *Midwinter*, too - it's bound to have a major impact on that company's position on the Company Counsel and in the machine charts.



THE MACHINE COUNTER

AMIGA RATINGS

Operation Thunderbolt	Ocean	93.47
Draxxon	Infogrames	91.67
Stunt Car Racer	Micro Style	69.75
It Came From the Desert	Cinemaware	58.01
Future Wars	Delphine/Palace	67.75

Ocean had last month's highest rated game with *P29 Ralalalar*; the month, *Operation Thunderbolt* takes over the top slot. *Stunt Car Racer* and *It Came From the Desert* continue to attract high scores.

COMMODORE 64 RATINGS

Ghosts'n Ghosts	US Gold	87.38
Turbo Outrun	US Gold	86.19
Swishio	Pinkbird	78.48
Sm City	Infogrames	74.5
Eye of Harus	Logotron	68.25

It was a poor month for C64 releases - in terms of quality rather than quantity with only the two US Gold titles consistently scoring over 80. Interesting to note that while the C64 definitely had the best version of *Turbo Outrun*, it was the poorest format for Ocean's rival driving game, *Chase HQ*.

AMSTRAD CPC RATINGS

Ghosts'n Ghosts II	Activision	85.5
Scapeghost	Level 9	85.5
Operation Thunderbolt	Ocean	83.03
Hard Drive	Domark	82.5
War Machine	Players Premier	82

Ghosts'n Ghosts II hangs onto the top slot, demon straining that the early reviews caught the essence of the game. On one level, anyway. *Scapeghost* must be playing Level 9 - the Amstrad was always a strong machine for graphical adventures.

ATARI ST RATINGS

Chaos Strikes Back	FTL	92.83
Tower of Babel	Rainbird	91.5
Future Wars	Delphine/Palace	87
Stunt Car Racer	Micro Style	87
Ghosts'n Ghosts	US Gold	84.53

There were high expectations of *Chaos Strikes Back* and the verdict is that it did not disappoint. Rainbird too can usually be relied on to produce quality releases and while *World Dream* hasn't set the world alight, *Tower of Babel* has been very highly rated.

PC-COMPATIBLE RATINGS

Indiana Jones 500	Electronic Arts	91.09
Their Finest Hour	US Gold	87
Die Hard	Activision	85.5
Neuromancer	Electronic Arts	85
Populous	Electronic Arts	83.5

The poor PC turn-out last month may just have been a glitch. PC owners have something to spend their money on this time. Electronic Arts is threatening to dominate the chart, especially as it has plenty more PC programs to release this spring.

SPECTRUM RATINGS

Chase HQ	Ocean	
Ghosts'n Ghosts	US Gold	88.67
Hard Drive	Domark	87.85
Super Wonder Boy	Activision	86.25
Operation Thunderbolt	Ocean	85.68

Chase HQ may have been received poorly on the Commodore 64, but by common consent it's the best Spectrum game around (it scored over 80 points last month as well).

THE 16-BIT COUNTER

The follow up to *Dungeon Master* goes straight in at number one on one format alone, while *Blade's Laser Squad* a consistently well-received over all three formats.

Chaos Strikes Back	FTL	ST	92.83
North and South	Infogrames	Amiga ST	91.5
Laser Squad	Blade	Amiga PC, ST	90
Operation Thunderbolt	Ocean	Amiga	89.84
Stunt Car Racer	Micro Style	Amiga ST	89.5
Future Wars	Delphine/Palace	Amiga ST	89.5
Kidnapper	Infogrames	Amiga ST	87.34
X-Cal	Rainbow Arts	Amiga	86.7
Ghosts'n Ghosts	US Gold	Amiga ST	86.14
Indiana Jones 500	Electronic Arts	PC	86.17

Bubbling under: *Batman - the Movie*, *Maniac Mansion*, *It Came From the Desert* and *Battle Squadron*.

THE 8-BIT COUNTER

There are some great value budget games around at the moment, with four titles here at at least 99 rated at over 80%. Ocean's *Operation Thunderbolt* is proving a huge success on all formats.

Great Escape	HR Squad	C64 Sp	89.33
Dizzy III Fantasy World	Code Masters	CPC Sp	88.25
Pennsquad	Ocean	CPC Sp	86.21
Unouchables	HR Squad	CPC C64 Sp	84
Hard Drive	Ocean	CPC C64	83
Sailing	Domark	CPC Sp	83.75
Ping Pong	Mastartronic	CPC C64 Sp	81.67
Ghosts'n Ghosts	HR Squad	CPC C64 Sp	78.44
Turbo Outrun	US Gold	CPC C64 Sp	77.2

Bubbling under: *Too Ban*, *Dan Dare III*, and *Footballer of the Year II*.

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Prices include 2 extra black ribbons free of charge.

- | | |
|---|---------|
| Star LC10 multi-font 24pin printer, amazing new low price | £239.00 |
| Star FR-10 9pin 300/70cps with 31K buffer, 16 NLQ modes | £399.00 |
| EE-PRIM memory & 12 months on-site maintenance | £499.00 |
| Star FR-15 wide carriage version of above FR-10 | £499.00 |
| Star LC-15 wide carriage version of above LC10 | £329.00 |
| Oliveretti KXP1003 super 9pin 300/30 cps, 1 year on-site warranty | £129.95 |
| Panasonic KXP1001 reliable & sturdy 9pin 107 printer 120/24 cps | £159.00 |
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| Epson LX400 (new LX300) budget 107 180/28 cps | £199.00 |
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| Minimasterc Tally MT-51 130/24 cps | £149.00 |

All prices include VAT and delivery. Express Carrier delivery £5.00 extra.

HOW TO WIN the ACE Stockmarket.

So you want to get your hands on some of those Stockmarket prizes, eh? Or possibly even the £150 jackpot? Here are a few tips.

First, the prizes themselves. There are seven prizes available each month. These go to the seven readers who get CLOSEST (you don't have to get them exactly right) to predicting the top three games in the correct order in each of the six machine categories (CPC, Amiga, ST, G64, PC, Spectrum) and the top three software houses (again in the correct order) on the Company Counter.

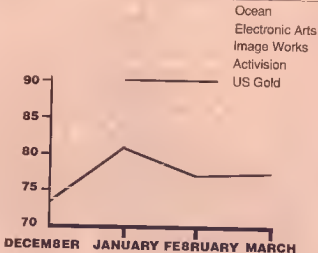
Remember - you don't have to get them exactly right to win a prize, you just have to be the closest. If, however, you get all three right and in the correct order, you stand to win the jackpot prize of £150 worth of software. Any draws are decided by pulling the tied entries out a hat.

Of course, predicting next month's positions isn't easy. However, if you're keen on games, you'll stand good chance. For example, last month it was a reasonable bet that FTL's Chase Strive Black would be reviewed this month and get high ratings. Straightaway you've got one potential entry for the top five. Looking ahead to next month, (and we'll give you a tip here) most magazines will be covering Mike Singleton's Midwinter, which again is bound to get high marks. Will they be high enough to push it into the top three? Time will tell.

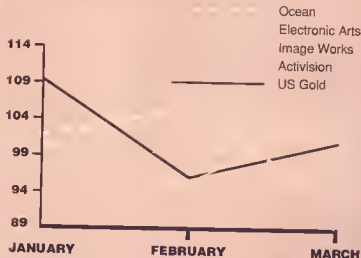
Of course, if you're really keen, you can try analysing the performance of companies by looking back over past issues of the Stockmarket and trying to pinpoint patterns. However, we've tried this ourselves (see the tables on this page) and it's one thing stands out clearly, it's that there are NO easy to perceive patterns. The best way to win a prize is not to get involved in all sorts of complicated calculation, but simply to find out which games you think are likely to be released and reviewed in the following month and then draw up your predictions accordingly.

Just a word about deadlines. The ACE Stockmarket figures are compiled during the two weeks following the first Thursday of each month and appear in the issue that comes out on the first Thursday of the following month. So this month's figures were put together between 4th and the 18th of January.

So get to it; the form's on page 112.



These charts show the erratic performance of five major software houses during the last few months. The top chart shows average review ratings and the bottom chart the share price of each company.



ACE DEALERS

WE KNOW HOW IT IS - YOU'VE SPENT MOST OF YOUR HARD EARNED DOSH OVER CHRISTMAS AND THE NEW YEAR, AND NOW ALL THERE IS LEFT TO DO IS HUDDLE ROUND A CANDLE LOOKING MISERABLE. OF COURSE THE OCCASIONAL CHUNK OF DRIED BREAD AND CUP OF DIRTY RAINWATER ARE NO CONSOLATION - YOU'D MUCH RATHER HAVE THE LATEST SOFTWARE SENSATION INSTEAD. SO HOW DO YOU FIND THAT UNMISSABLE BARGAIN OR SPECIAL OFFER? LOOK NO FURTHER THAN THE ACE DEALERS PAGE OF COURSE...

ACE - GREAT DEALS

Many retailers are trying to have a breather this month, following the Christmas rush and the January sales. There are fewer games being released and the next big batch of promotions and competitions will probably take place round about Easter time.

VIRGIN SALE

Despite the lull, the Virgin Games Centre sale continues until the middle of this month, with a whole host of special offers so pop in to see what they have on offer. Once the sale stock has been cleared away, Virgin hopes to have a special promotion set up with Micro-

details available as ACE went to press, I'm afraid but it should be worth investigation.

FREE FERRARISI

Accolade's model Ferrari promotion, linked to Test Drive II - The Duel, continues, with the Northern Computer Shop chain offering a Matchbox model car with every copy of the game. All names go into the prize draw for a Barcha model of a 1987 Ferrari F40 mounted on a wooden plinth, complete with moving parts.

SOMEWHERE OVER THE RAINBOW

Computer Shops are also working on some forthcoming special offers with the long-awaited

ed Rainbow Islands (now being released by Ocean) and Pandora's Xenomorph. Check with your local Computer Shop branch locations below for details.

T-SHIRTS AND DRAWS

Buyers in Birmingham and Newcastle should drop into their local branch of Microbyte on Saturday, February 17. Spend over £15 on any Ocean titles in Birmingham on that day, and you'll get a T-shirt and poster to go with the game. Plus your name will go into a draw with mystery prizes available to be won.

BUDGET DAY

In Microbyte Newcastle February 17 is a special budget buyers' day. With

any full price purchase, you can also buy any 8-bit budget game for just £1. A remote-controlled model car is also up for grabs in a one-day competition.

ACE DISCOUNT

Microbyte is also offering readers of this page a 10% discount on goods bought at any of its stores, provided you present the voucher below when you make your purchase. Happy bargain hunting!

WHERE IT'S AT...

You can find Computer Shop outlets in the Arcade Centre, Manchester; Newcastle; Preston, Salford; Stockton and Nottingham. Also part of the Computer Shop chain

are the two Games Store outlets in Carlisle and Middlesbrough, which stock role-playing games as well as computer software.

There are Microbyte stores in the Arcade Centre, Manchester; the Broadmarsh Centre, Nottingham; Kirkgate, Wakefield; the Metro Centre, Gateshead; the Greenmarket, Newcastle upon Tyne; the Kirkgate Centre, Bradford; the Bull Ring Centre, Birmingham; and the County Arcade, Leeds.

Virgin outlets on London's Oxford Street (at Marble Arch, within the Megastore), and at no. 1000 and Bristol, and also in Megastores in Birmingham, Brighton, Dublin, Edinburgh, Glasgow (at Union St and Argyle St,

Leeds and Nottingham. One of these must be near you!

All offers and promotions are subject to availability of stock. Although we do our best to ensure our dealer promotion information is accurate at the time of going to press, ACE cannot take any responsibility for changes or cancellations to dealers' plans.

FREE PUBLICITY!

Attention dealers! Don't keep your promotions, special offers, etc., a secret. Tell us at ACE and we'll tell everybody else.

AN 'ACE' OFFER FROM MICROBYTE

TO CELEBRATE BEING VOTED
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MICROBYTE WILL GIVE YOU

10% DISCOUNT

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PRODUCTION OF THIS VOUCHER AT ANY OF
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THE METRO CENTRE, GATESHEAD; THE GREENMARKET, NEWCASTLE; THE BULL RING CENTRE, BIRMINGHAM; KIRKGATE,
WAKEFIELD; THE BROADMARSH CENTRE, NOTTINGHAM.

NOTE: THIS VOUCHER CAN BE USED ONLY ONCE.

PINK PUZZLERS

PUZZLE RESULTS

First off some results and solutions. The winner of Prize Puzzle 16 was **Chi Chiu Ching** St. Ann's, Nottm. £10 will shortly be winging its way to you, Chi. Puzzle 17 never happened (oops), but Mr. K.

A. Siddiqui of Chiswick, London, also receives £10 for winning Prize Puzzle 18.

Next month we'll bring you the solutions and prizewinners for the Jan '90 Prize Puzzle, and the Feb '90 Prize Crossword.

And finally, here was a P.S. found on a competition entry from **Anne-Marjam Maczewski** of Hidesheim, West Germany. "Why don't you make your forms so small that they can fit on a postcard! It would cost me about 15p less!"

Well Anne, the short answer is that we really don't mind if you put your competition answers on a postcard rather than the standard form. As long as you give us all the information that is requested on the form, and as long as it's clear, there is no

problem for us. Obviously if the form contains a diagram like a Crossword Grid then you'll have to return the whole form.

(Unless of course you want to copy it out in miniature on your postcard (only joking - please don't!))

SOLUTION TO PUZZLE 19

The multiplication was

```

9842
 224
33408
-----
23556
8848
13704
-----
25405792

```

The problem involved finding two four-digit numbers which produced a long multiplication which had the digits 2 to 8 running diagonally downwards from the top right hand corner. In addition, each of the four sub-products (lines 3 to 7 of the multiplication) comprised five digits.

Because the digits '2' and '3' in the top two lines are 'fixed' it is only necessary to consider the remaining three digits in each of these lines. In the program this is done in lines 100 and 120, the known digits being inserted into the correct positions by means of the two string variables AS and BS.

The four sub-products are generated from these two values and are stored in the strings CS to LS in turn. As each is computed it is tested to ensure that it has a length of five characters, the third character in each case agreeing with the known digits on these lines of the sum.

Finally, the full product is calculated (line 260) and is tested for the presence of the digit '8' in second place.

```

100 LOR B=100 TO 999:AS=STR$B
110 BS=BS+"2"
120 FOR D=100 TO 999:BS=STR$D
130 BS=LEFT$(BS,2)+"3"+RIGHT$(BS,1)
140 CS=STR$(B*AS)
150 IF LEN(CS) < 5 THEN 300
160 IL=MID$(CS,1,10)+"4" THEN 300
170 OS=STR$(B*OS)
180 IF LEN(OS) < 5 THEN 300
190 IL=MID$(OS,1,10)+"5" THEN 300
200 ES=STR$(B*ES)
210 IF LEN(ES) < 5 THEN 300
220 IL=MID$(ES,1,10)+"6" THEN 300
230 FS=STR$(B*FS)
240 IF LEN(FS) < 5 THEN 300
250 TL=MID$(FS,1,10)+"7" THEN 300
260 GS=STR$(B*GS)
270 IF LEN(GS) < 5 THEN 300
280 IF MID$(GS,2,10) < "8" THEN 300
290 PRINT BS;"*";AS
300 NEXT B
310 NEXT A

```

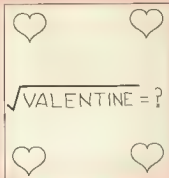
The winner is **Geman Llyan** Kettering, Northants.

MARCH '90 PRIZE PUZZLE

Sent by Archie Medas

The cover date of this issue is March, but if you were quick enough to the newspaper you should have managed to obtain your copy in time for Valentine's Day. So here's a puzzle in the spirit of things.

Last year on February 14th, I received the following unusual Valentine card.



Enclosed within the card were the following instructions:

Can you find the square root of Valentine? To do so simply substitute each of the letters in the word 'Valentine' for a digit - a different digit for each differing letter, the same digit where any letter is repeated. If you have done this correctly the square root of this value will be a whole number. There is only one possible solution provided that you replace the 'E' with a .

Unfortunately, in the intervening twelve months I've forgotten just which of the digits was represented by 'E'. But, even so, you should still be able to solve this puzzle.

SOLUTION TO PUZZLE 20

Henry bought

2 cassette players at £15.99 each	£31.98
2 teddy bears at £8.85 each	£17.70
1 game at £21.73	£21.73
1 Christmas hamper at £17.59	£17.59
and 1 shirt & tie set at £11.00	£11.00
Total	£100.00

In the listing each of the presents is assigned its price (lines 10 to 70). A series of seven FOR/NEXT loops then calculates every possible combination of gifts possible. Each loop (except for the last one) starts with a value of zero and extends to the maximum number of gifts of that price that can be bought for one hundred pounds. The final loop, which represents the number of shirts bought commences at 1 because we know there is at least one shirt on the list.

Line 170 calculated the total price for each combination of gifts, any which come to exactly one hundred pounds are printed out.

```

10 PLAYER=1599
20 TEDDY=885
30 DISC=599
40 GAME=2173
50 BOTTLE=947
60 HAMPER=1759
70 SHIRT=1100
100 FOR P=0 TO 10000/PLAYER
110 FOR T=0 TO 10000/TEDDY
120 FOR D=0 TO 10000/DISC
130 FOR G=0 TO 10000/GAME
140 FOR B=0 TO 10000/BOTTLE
150 FOR H=0 TO 10000/HAMPER
160 FOR S=1 TO 10000/SHIRT
170 Z=P*PLAYER+T*TEDDY+D*DISC+
G*GAME+B*BOTTLE+H*HAMPER+S*SHIRT
180 IF Z=10000 THEN PRINT P;"T";"D";"G";
"B";"H";"S"
190 NEXT H:NEXT B:NEXT G:NEXT D:NEXT T:NEXT P
200 END

```

The winner is **David Wood** Cleethorpes, Sth Humber side.

MARCH '90 PRIZE PUZZLE ENTRY FORM

NAME

ADDRESS: ...
.....
.....

TELEPHONE: ..

ANSWER:

Send to: March '90 Prize Puzzle, ACE Magazine, Priory Court, 30-32 Farringdon Lane, London, EC1R 3AU. Entries should be postmarked no later than 28th February 1990.

ACE READERS' PAGES

FOR SALE

VHS camera, panasonic 1410 B/W camera and lens. As new ideal for digital VCR etc. £50 Tel 061 798 0456 Dave

A500 1 meg 10845 motor for £500 software and lots more all this for only £550 will split. Contact Adam on 0460 72178

ORIGINAL AMIGA GAMES for sale, Falcon, FOFT, For gotten Worlds Precious Metal, Trid, Robocop, Operation Wolf, Dragon Ninja Phone Sheffield 739571

COMMODORE 64, C2N, joystick over £150 original games £130 cmo Tel 0268 734185 evenings and weekends only

SEGA TWO joypads, control stock gun, 11 games atboxed, VGC, worth £360, only £125, will separate, Tel 0268 45057.

AMSTRAD CPC 464 400k screen, Incl TV modulator, lightpen, games & mags £150 cmo Tel Eves 01 731-3751

SPECTRUM 48K + computer for sale in bargain at £80 with Konix joystick and £20 games Ring Derry on 0785 820246

ATARI ST 0/500 joys tick over £500 of games good condition all boxed price £350 Tel 870 9965 after 5pm

AMIGA 1 MEG, modulator, sound sampler, mouse, joysticks, games, external drive, manuals, excellent condition Boxed, Tel 01 204-9030 Sell for £385

COLOR MONITOR, good condition with ST cable £900, £500 of OR16 software £800, Tel Tiv 0305 779261 WHAT A BARGAIN!

ATARI 520STEM for sale £240, mouse and 50 blanks, wilmuster joystick Tel 0704 37581 and ask for Alan

AMIGA 500 4 months old TV modulator, quick sale £299 cmo Tel Tony after 5pm 0268 412223 cash only buyer to collect

128K SPECTRUM £500 games joysticks interfaces over 100 top computer mags and Sega master system for sale Tel: Staines 451155.

PENPALS

AMIGA CONTACTS want ed worldwide Write to Agent Steve Adenauer - team 43 3527RA Utrecht, Holland Fast reply, don't be shy!

Amiga contacts wanted, 200% reply fast and reliable send lists to Simon, 16 Church View Burton Laines, North Hants NN15 5LG

Amiga contacts wanted latest stuff only 100% reply Jason, 1 Hender son Street, Budge of Scotland, Strirling, Scotland FK9 4NA or telephone 0786 832841

PC CONTACTS WANTED from the Twilight Zone Write to Geoff Parker, 33 Sunnyside Ave, Wit shire, Blackburn BB1 9LW LANCs, England

AMIGA CONTACTS WANTED 100% reply send lists and disks to Ray 413 Glenkayles Ave, Rushey Mead Est Leicester LE4 7YJ Eng land

AMIGA CONTACTS want ed to swap latest stuff send lists to Bernard, 31 Bughley Rd, Wimbledon, London SW19 5HL 200% reply

AMIGA CONTACTS WANTED ad over the world, 101% reply Write to Ono, 5 Wick low Close, Shipshed, Nt L bovo, Leics LE12 9 BJ

AMIGA PENPALS WANT- ED 110% reply Write to Jeff, 45 Westbury St, Laister Dyke Bradford BD4 8PB

HELPLINE

PLEASE HELP WITH Police Quest 2 Wit refund stamps, P Darin, 18 Woodall Rumble Boarogost, Perth WA 6154

EXPERIENCED AMIGA USER NEEDED to help new owner with occa sional problems Write to C Bernard - 53 Guildford View, Norfolk Park Sheffield S2 2NW

HELP WANTED for ST version of Rattles Cheats or pokes for extra lists as I am combing up the wall - HELPH

IBM owner offer help on Battle Tech, Bards Tale Kings Quest 1, 11, 111, Pottery Quest 1, Space Quest 1, 11, Larcure sirt Larry 1, 11, Bionic commands, Trojan, Ghosts N Goblins, Ninja, Montezuma Revenge and any other

problems associated with IBM compeniss and compatibles. Plus con tacts wanted to swap hints, tips genius ect Send disks and list to Peut Chek, 28 Inveraray Crescent, Hameisley, Perth, Western Aus tralia, 6022

BLOODWYCH (ATARI ST) where is the Iron Key on Level one? Desperate, please help Telephone RAE 0224 734723 NOW!

CAN ANYONE OUT THERE HELP ME with the new game for the SEGA MASTER SYSTEM called 'Spallicaster' I cannot find the Vaga but I can find every other weapon I also need to know the exact location of the Vajra and the enemy you fight in the Pyramid I also need to know how to find all the defense weapons

Could you send your replies to Glen McCauchan, 12c Swallow Rd, Furley, Clydebank G81 5BW I can also give help for a lot of other Sega games

T69/4A assistance pro gramming, games, sup plies, contacts, free help, SAE Stephan Shaw, 10 Alstone Rd, Stockport, Ches

WANTED

Chase HQ computer game wanted for Spectrum+3 computer (disk) Tel: Aja 850903 Please!

Require space quest one with or without hints book compatible with IBM PC ect. Cash paid.

Any old or disused computer software for cash, SAE ISG 104 Church St, Stoke on Trent, Staffs Tel: 0782 747174 (tapes/disks)

NOTICE!!
DO YOU HAVE ANY
THING TO SELL? NEED
HELP ON ANY GAMES?
YES?
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PAGE 121, FILL IN THE
ENTRY FORM AND
SEND IT TO US- NO
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The BLITTER END

THE SECRET'S OUT!



Or is it? Last month's Blitter carried a piece about Steve Franklin of Commodore, who bullishly declared the existence of a secret weapon which would keep the Japanese console invasion at bay.

Since then, there has been no elaboration from Commodore on what this secret weapon might be. Ino, it's not David Jensen – that cheque in the picture is for charity, not for repelling the Japanese! Blitter, however, has an inkling of what could be in the wind.

Punters at this year's CES show (see report in this issue on page 18) were beguiled by reports of cartridge software for the C64. This doesn't sound particularly interesting, except that it would enable Commodore to produce at very little cost a small plastic box with a cartridge slot, two joystick ports, a video outlet, and a power socket.

This box would run games like Boulderdash, Impossible Mission, Elite, and Mercenary. Well, it would if the programmers of some of these titles could be persuaded to produce joystick-only versions.

Boxes like these are called consoles, and Commodore – if the rumours are to be believed – may well think they've got a Nintendo beater on their hands.

There are, unfortunately, two flaws in this philosophy. The first is that for many punters the word console does not mean cheap plastic box with great games anymore. It means not-so-cheap-plastic box with state-of-the-art graphics and sound technology and a smaller number of technically impressive titles.

The second flaw has already been pointed out by Blitter in previous issues. If Nintendo decide to enter the European market (and Blitter doesn't believe they will – but more of that another month), they will do so in force. The company are now in a position to GIVE AWAY their NES console to everyone who can jump the queue at

Dixons, provided, of course, that the punter pays out £30 for his first game cartridge. From then, Nintendo will reap yet more profits from the sale of further titles.

Faced with the technological snobbishness of today's console buyer and the sheer weight of the world's largest cash mountain, it's difficult to imagine anyone – including Commodore – winning the battle. Stand by for more on this next month.

QED recently showed a TV program which purported to examine the computer game phenomenon. What we got instead was yet another diatribe against gamers – who, it appears, are turning their brains to custard by sitting staring at the TV all day.

This is a bit of a joke, isn't it? A TV program telling us that watching too much TV is not a good thing? At least with games you interact with, get involved with, and have a degree of control over the medium. With TV, however, you just have to sit and swallow it.

Question: if you had to choose a Prime Minister from either the ranks of those who watch Neighbours and Coronation Street all the time or from the ranks of those who can demonstrate a high score in Dungeon Master, which group would you favour? No contest. Q E D

On the other hand, perhaps QED have a point. At CES, representatives of the UK software industry put up a good show for themselves. Led by someone who shall remain nameless, they drank themselves into the ground, sang Brits on the piss, and then disappeared into The Palamino to oggle naked women. Just shows you what a diet of games software can do to the soul.

Blat-Blitter

YANKEE DOODLE!

Boy, have we got a special Issue lined up for you!

Next month, we're sending intrepid ACE reporters to the US of A to bring you red hot coverage of some of the most exciting games developments on the West Coast.

We're planning the itinerary now as we go to press, but we expect to be providing you with an exclusive glimpse of George Lucas' ranch and the CD-I development projects underway at Lucasfilms, Electronic Arts, Cinemaware, and AIM – American Interecutive Media.

Best of all for some readers, however, will be a sneak peek at the development work now being carried on by Robyn and Rand Miller of Cyan – the team who brought you Cosmic Oemo.

Don't miss next month's ACE – faking you to the frontier frontiers of computer entertainment.

Ooops!

Blitter would never be complete without an Ooops or two. Last month the Arcade Pages succumbed to the printer's curse: they were printed the wrong way round! Whoopay daisy...

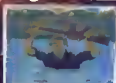
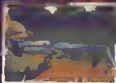
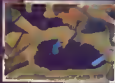
WE'RE FIT, WE'RE ALIVE, BUT...

LOST PATROL



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which we've never seen before!
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ATARI ST

RAINBOW ISLANDS



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AN EXCELLENT GAME AND ONE
THAT OFFERS A GOOD DEAL OF
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"THE GRAPHICS WITHIN RAINBOW
ISLANDS ARE VIRTUALLY IDENTICAL
TO THE ARCADE & VERY
NICELY DEFINED"

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ISLAND HOP COIN-OP...
MONSTER HIT**

**SPECTRUM
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SMILES**